ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

AES

CHAIN OF CUSTODY

Work Order: 1711H94 ~~1711H94~~ MS

Date: 11/16/17 Page 3 of 3

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd SE Bin 10185 Atlanta GA 30308
PHONE: 678-548-9415	EMAIL: kevin.stephenson@southernco.com
SAMPLED BY: Kevin Stephenson	SIGNATURE: Kevin Stephenson

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	RDCS-26	11/15/17	1002	X			1		
2	RDCS-27	11/15/17	1300	X			1		
3	RDCS-28	11/15/17	1344	X			1		
4	RDCS-29	11/16/17	0842	X			1		
5	RDCS-30	11/16/17	1048	X			1		
6	RDCS-31	11/16/17	1256	X			1		
7	RDCS-32	11/16/17	1318	X			1		
8	RDCS-33	11/16/17	1436	X			1		
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.		1. Tanya Addice	11/17/17 955
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:
Kevin Stephenson
Forrest Howard
Trent Cadwell
Stephen Wilson
Lea Mullet

SHIPMENT METHOD
OUT: / / VIA: FedEx
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 455 Crossgate Road
SEND REPORT TO:
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental Affairs
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush **(auth req.)**
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-90
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/9/2017 9:56:00 AM
Lab ID:	1711H94-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.31		mg/Kg-dry	251695	20	11/20/2017 14:14	TA
Barium	12.8	9.38		mg/Kg-dry	251695	20	11/20/2017 14:14	TA
PERCENT MOISTURE D2216								
Percent Moisture	4.82	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-91
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/9/2017 10:00:00 AM
Lab ID:	1711H94-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.38		mg/Kg-dry	251695	20	11/20/2017 14:24	TA
Barium	13.6	7.53		mg/Kg-dry	251695	20	11/20/2017 14:24	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.47	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-92
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/14/2017 2:54:00 PM
Lab ID:	1711H94-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.26		mg/Kg-dry	251695	20	11/20/2017 14:26	TA
Barium	9.82	6.98		mg/Kg-dry	251695	20	11/20/2017 14:26	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.45	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-1SW
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 9:46:00 AM
Lab ID:	1711H94-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	65.1	7.43		mg/Kg-dry	251695	20	11/20/2017 14:28	TA
Barium	29.7	8.26		mg/Kg-dry	251695	20	11/20/2017 14:28	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.64	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-2
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 9:54:00 AM
Lab ID:	1711H94-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.32		mg/Kg-dry	251695	20	11/20/2017 14:36	TA
Barium	3.16	0.67		mg/Kg-dry	251695	20	11/20/2017 14:36	TA
PERCENT MOISTURE D2216								
Percent Moisture	2.51	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-3SW
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 10:02:00 AM
Lab ID:	1711H94-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.20		mg/Kg-dry	251695	20	11/20/2017 14:38	TA
Barium	19.3	8.58		mg/Kg-dry	251695	20	11/20/2017 14:38	TA
PERCENT MOISTURE D2216								
Percent Moisture	2.89	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-4SW
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 11:10:00 AM
Lab ID:	1711H94-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.27		mg/Kg-dry	251695	20	11/20/2017 14:40	TA
Barium	2.47	0.93		mg/Kg-dry	251695	20	11/20/2017 14:40	TA
PERCENT MOISTURE D2216								
Percent Moisture	2.23	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-5
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 11:16:00 AM
Lab ID:	1711H94-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.34		mg/Kg-dry	251695	20	11/20/2017 14:42	TA
Barium	2.39	0.82		mg/Kg-dry	251695	20	11/20/2017 14:42	TA
PERCENT MOISTURE D2216								
Percent Moisture	1.16	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-6
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 11:34:00 AM
Lab ID:	1711H94-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.34		mg/Kg-dry	251695	20	11/20/2017 14:44	TA
Barium	11.1	10.2		mg/Kg-dry	251695	20	11/20/2017 14:44	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.80	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-7SW
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 12:44:00 PM
Lab ID:	1711H94-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	18.6	7.12		mg/Kg-dry	251695	20	11/20/2017 14:46	TA
Barium	89.1	9.13		mg/Kg-dry	251695	20	11/20/2017 14:46	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.54	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-8
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 12:54:00 PM
Lab ID:	1711H94-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.08		mg/Kg-dry	251695	20	11/20/2017 14:48	TA
Barium	2.27	0.59		mg/Kg-dry	251695	20	11/20/2017 14:48	TA
PERCENT MOISTURE D2216								
Percent Moisture	1.59	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-9
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 1:02:00 PM
Lab ID:	1711H94-012	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.47		mg/Kg-dry	251695	20	11/20/2017 14:50	TA
Barium	35.8	6.79		mg/Kg-dry	251695	20	11/20/2017 14:50	TA
PERCENT MOISTURE D2216								
Percent Moisture	3.51	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-10
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 2:34:00 PM
Lab ID:	1711H94-013	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.15		mg/Kg-dry	251695	20	11/20/2017 14:52	TA
Barium	19.9	8.51		mg/Kg-dry	251695	20	11/20/2017 14:52	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.42	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-11
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 2:38:00 PM
Lab ID:	1711H94-014	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.25		mg/Kg-dry	251695	20	11/20/2017 14:54	TA
Barium	48.5	9.29		mg/Kg-dry	251695	20	11/20/2017 14:54	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.95	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-12
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 3:52:00 PM
Lab ID:	1711H94-015	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	15.0	7.19		mg/Kg-dry	251695	20	11/20/2017 15:02	TA
Barium	80.2	8.56		mg/Kg-dry	251695	20	11/20/2017 15:02	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.80	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-13
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 3:56:00 PM
Lab ID:	1711H94-016	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.30		mg/Kg-dry	251695	20	11/20/2017 15:05	TA
Barium	5.28	0.94		mg/Kg-dry	251695	20	11/20/2017 15:05	TA
PERCENT MOISTURE D2216								
Percent Moisture	2.54	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-14
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 4:00:00 PM
Lab ID:	1711H94-017	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.46		mg/Kg-dry	251695	20	11/20/2017 15:07	TA
Barium	14.7	10.1		mg/Kg-dry	251695	20	11/20/2017 15:07	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.62	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-15
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/13/2017 12:22:00 PM
Lab ID:	1711H94-018	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.45		mg/Kg-dry	251695	20	11/20/2017 15:08	TA
Barium	14.5	7.45		mg/Kg-dry	251695	20	11/20/2017 15:08	TA
PERCENT MOISTURE D2216								
Percent Moisture	9.36	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-16SW
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/14/2017 7:54:00 AM
Lab ID:	1711H94-019	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.34		mg/Kg-dry	251695	20	11/20/2017 15:11	TA
Barium	14.1	7.34		mg/Kg-dry	251695	20	11/20/2017 15:11	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.55	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-17
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/14/2017 8:42:00 AM
Lab ID:	1711H94-020	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	10.5	7.39		mg/Kg-dry	251695	20	11/20/2017 15:13	TA
Barium	41.3	9.99		mg/Kg-dry	251695	20	11/20/2017 15:13	TA
PERCENT MOISTURE D2216								
Percent Moisture	15.9	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-18
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/14/2017 11:32:00 AM
Lab ID:	1711H94-021	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.30		mg/Kg-dry	251696	20	11/20/2017 15:19	TA
Barium	11.0	8.49		mg/Kg-dry	251696	20	11/20/2017 15:19	TA
PERCENT MOISTURE D2216								
Percent Moisture	12.9	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-19
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/14/2017 1:06:00 PM
Lab ID:	1711H94-022	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.25		mg/Kg-dry	251696	20	11/20/2017 15:35	TA
Barium	2.99	0.77		mg/Kg-dry	251696	20	11/20/2017 15:35	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.36	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-20
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/14/2017 1:12:00 PM
Lab ID:	1711H94-023	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.32		mg/Kg-dry	251696	20	11/20/2017 15:37	TA
Barium	1.01	0.73		mg/Kg-dry	251696	20	11/20/2017 15:37	TA
PERCENT MOISTURE D2216								
Percent Moisture	2.55	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-21
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/14/2017 2:04:00 PM
Lab ID:	1711H94-024	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.31		mg/Kg-dry	251696	20	11/20/2017 15:39	TA
Barium	3.16	0.78		mg/Kg-dry	251696	20	11/20/2017 15:39	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.70	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-22
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/14/2017 2:16:00 PM
Lab ID:	1711H94-025	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.26		mg/Kg-dry	251696	20	11/20/2017 15:41	TA
Barium	4.30	0.77		mg/Kg-dry	251696	20	11/20/2017 15:41	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.22	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-23
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/15/2017 7:52:00 AM
Lab ID:	1711H94-026	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.26		mg/Kg-dry	251696	20	11/20/2017 15:43	TA
Barium	1.46	0.79		mg/Kg-dry	251696	20	11/20/2017 15:43	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.87	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-24
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/15/2017 8:02:00 AM
Lab ID:	1711H94-027	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.42		mg/Kg-dry	251696	20	11/20/2017 15:45	TA
Barium	1.19	0.76		mg/Kg-dry	251696	20	11/20/2017 15:45	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.28	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-25
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/15/2017 8:48:00 AM
Lab ID:	1711H94-028	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.43		mg/Kg-dry	251696	20	11/20/2017 15:47	TA
Barium	2.40	0.81		mg/Kg-dry	251696	20	11/20/2017 15:47	TA
PERCENT MOISTURE D2216								
Percent Moisture	11.9	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-26
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/15/2017 10:02:00 AM
Lab ID:	1711H94-029	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.30		mg/Kg-dry	251696	20	11/20/2017 15:55	TA
Barium	1.07	0.73		mg/Kg-dry	251696	20	11/20/2017 15:55	TA
PERCENT MOISTURE D2216								
Percent Moisture	2.27	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-27
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/15/2017 1:00:00 PM
Lab ID:	1711H94-030	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.32		mg/Kg-dry	251696	20	11/20/2017 15:57	TA
Barium	1.58	0.78		mg/Kg-dry	251696	20	11/20/2017 15:57	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.16	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-28
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/15/2017 1:44:00 PM
Lab ID:	1711H94-031	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.15		mg/Kg-dry	251696	20	11/20/2017 15:59	TA
Barium	2.01	0.79		mg/Kg-dry	251696	20	11/20/2017 15:59	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.90	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-29
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/16/2017 8:42:00 AM
Lab ID:	1711H94-032	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.42		mg/Kg-dry	251696	20	11/20/2017 16:01	TA
Barium	1.38	0.76		mg/Kg-dry	251696	20	11/20/2017 16:01	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.26	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-30
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/16/2017 10:48:00 AM
Lab ID:	1711H94-033	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.15		mg/Kg-dry	251696	20	11/20/2017 16:03	TA
Barium	1.40	0.76		mg/Kg-dry	251696	20	11/20/2017 16:03	TA
PERCENT MOISTURE D2216								
Percent Moisture	5.24	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-31
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/16/2017 12:56:00 PM
Lab ID:	1711H94-034	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.16		mg/Kg-dry	251696	20	11/20/2017 16:05	TA
Barium	2.43	0.76		mg/Kg-dry	251696	20	11/20/2017 16:05	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.59	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-32
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/16/2017 1:18:00 PM
Lab ID:	1711H94-035	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.45		mg/Kg-dry	251696	20	11/20/2017 16:07	TA
Barium	1.19	0.74		mg/Kg-dry	251696	20	11/20/2017 16:07	TA
PERCENT MOISTURE D2216								
Percent Moisture	4.75	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-33
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/16/2017 2:36:00 PM
Lab ID:	1711H94-036	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.43		mg/Kg-dry	251696	20	11/20/2017 16:09	TA
Barium	1.13	0.76		mg/Kg-dry	251696	20	11/20/2017 16:09	TA
PERCENT MOISTURE D2216								
Percent Moisture	5.95	0		wt%	R357256	1	11/20/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1711H94**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 3.8 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 11/17/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). AJJ 11/17/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). AJJ 11/17/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1711H94

ANALYTICAL QC SUMMARY REPORT

BatchID: 251695

Sample ID: **MB-251695** Client ID: Units: **ug/Kg** Prep Date: **11/17/2017** Run No: **357318**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251695** Analysis Date: **11/20/2017** Seq No: **7874212**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-251695** Client ID: Units: **ug/Kg** Prep Date: **11/17/2017** Run No: **357318**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251695** Analysis Date: **11/20/2017** Seq No: **7874214**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5472	2000	5000		109	80	120				
Barium	5174	1000	5000		103	80	120				

Sample ID: **1711H94-001AMS** Client ID: **LFCS-90** Units: **mg/Kg-dry** Prep Date: **11/17/2017** Run No: **357318**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251695** Analysis Date: **11/20/2017** Seq No: **7874216**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.31	4.687		107	75	125				
Barium	18.04	9.37	4.687	12.83	111	75	125				

Sample ID: **1711H94-001AMSD** Client ID: **LFCS-90** Units: **mg/Kg-dry** Prep Date: **11/17/2017** Run No: **357318**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251695** Analysis Date: **11/20/2017** Seq No: **7874217**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.32	4.690		106	75	125	5.033	0	20	
Barium	18.82	9.38	4.690	12.83	128	75	125	18.04	4.25	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1711H94

ANALYTICAL QC SUMMARY REPORT

BatchID: 251696

Sample ID: **MB- 251696** Client ID: Units: **ug/Kg** Prep Date: **11/17/2017** Run No: **357319**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251696** Analysis Date: **11/20/2017** Seq No: **7874258**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS- 251696** Client ID: Units: **ug/Kg** Prep Date: **11/17/2017** Run No: **357319**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251696** Analysis Date: **11/20/2017** Seq No: **7874470**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5735	5500	5000		115	80	120				
Barium	4830	500	5000		96.6	80	120				

Sample ID: **1711H94-021AMS** Client ID: **RDCS-18** Units: **mg/Kg-dry** Prep Date: **11/17/2017** Run No: **357319**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251696** Analysis Date: **11/20/2017** Seq No: **7874261**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.29	4.239	0.8764	22.0	75	125				S
Barium	13.77	8.48	4.239	10.98	65.6	75	125				S

Sample ID: **1711H94-021AMSD** Client ID: **RDCS-18** Units: **mg/Kg-dry** Prep Date: **11/17/2017** Run No: **357319**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251696** Analysis Date: **11/20/2017** Seq No: **7874264**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	6.78	4.240	0.8764	12.7	75	125	1.811	0	20	S
Barium	9.808	8.48	4.240	10.98	-27.7	75	125	13.77	33.6	20	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 22, 2017

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1711K58

Analytical Environmental Services, Inc. received 7 samples on 11/21/2017 10:20:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1711K58

Date: 11/28/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308
PHONE: 678-948-9415
EMAIL: Kevin.Stephenson@Southernco.com
SAMPLED BY: Kevin Stephenson
SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes) NA	REMARKS	Number of Containers
1	RDCS-34	11/17/17	0848	X		SO	1		1
2	RDCS-35	11/20/17	0830	X		SO	1		1
3	RDCS-36	11/20/17	0850	X		SO	1		1
4	RDCS-37	11/20/17	0900	X		SO	1		1
5	RDCS-38	11/20/17	1026	X		SO	1		1
6	RDCS-39	11/20/17	1038	X		SO	1		1
7	RDCS-40	11/20/17	1050	X		SO	1		1
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED: EPA 6020 Ag, Ba

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY: DATE/TIME:
1.
2.
3.

RECEIVED BY: DATE/TIME:
1. 11/21/17 10:20
2.
3.

SPECIAL INSTRUCTIONS/COMMENTS:
Kevin Stephenson
Forrest Howard
Stephen Wilson
Trent Goodwin
Lee Millet

SHIPMENT METHOD
OUT: 11 /20/17 VIA: FedEx
IN: / / 0538 VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Cranberry Road
SEND REPORT TO:
INVOICE TO:
(IF DIFFERENT FROM ABOVE)
GPC Environmental Affairs
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 7

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 22-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-34
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/17/2017 8:48:00 AM
Lab ID:	1711K58-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.35		mg/Kg-dry	251899	20	11/21/2017 17:28	TA
Barium	13.4	9.67		mg/Kg-dry	251899	20	11/21/2017 17:28	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.24	0		wt%	R357472	1	11/22/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 22-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-35
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/20/2017 8:30:00 AM
Lab ID:	1711K58-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.43		mg/Kg-dry	251899	20	11/21/2017 17:43	TA
Barium	13.4	10.3		mg/Kg-dry	251899	20	11/21/2017 17:43	TA
PERCENT MOISTURE D2216								
Percent Moisture	9.04	0		wt%	R357472	1	11/22/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 22-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-36
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/20/2017 8:50:00 AM
Lab ID:	1711K58-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.39		mg/Kg-dry	251899	20	11/21/2017 17:45	TA
Barium	26.6	8.40		mg/Kg-dry	251899	20	11/21/2017 17:45	TA
PERCENT MOISTURE D2216								
Percent Moisture	11.0	0		wt%	R357472	1	11/22/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 22-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-37
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/20/2017 9:00:00 AM
Lab ID:	1711K58-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	8.82	7.36		mg/Kg-dry	251899	20	11/21/2017 17:47	TA
Barium	80.2	8.98		mg/Kg-dry	251899	20	11/21/2017 17:47	TA
PERCENT MOISTURE D2216								
Percent Moisture	10.9	0		wt%	R357472	1	11/22/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 22-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-38
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/20/2017 10:26:00 AM
Lab ID:	1711K58-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.20		mg/Kg-dry	251899	20	11/21/2017 17:49	TA
Barium	25.5	8.57		mg/Kg-dry	251899	20	11/21/2017 17:49	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.89	0		wt%	R357472	1	11/22/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 22-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-39
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/20/2017 10:38:00 AM
Lab ID:	1711K58-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.16		mg/Kg-dry	251899	20	11/21/2017 17:51	TA
Barium	17.0	8.74		mg/Kg-dry	251899	20	11/21/2017 17:51	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.53	0		wt%	R357472	1	11/22/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 22-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	RDCS-40
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/20/2017 10:50:00 AM
Lab ID:	1711K58-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.24		mg/Kg-dry	251899	20	11/21/2017 17:53	TA
Barium	13.9	8.83		mg/Kg-dry	251899	20	11/21/2017 17:53	TA
PERCENT MOISTURE D2216								
Percent Moisture	9.50	0		wt%	R357472	1	11/22/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1711K58

ANALYTICAL QC SUMMARY REPORT

BatchID: 251899

Sample ID: **MB-251899** Client ID: Units: **ug/Kg** Prep Date: **11/21/2017** Run No: **357505**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251899** Analysis Date: **11/21/2017** Seq No: **7878673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-251899** Client ID: Units: **ug/Kg** Prep Date: **11/21/2017** Run No: **357505**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251899** Analysis Date: **11/21/2017** Seq No: **7878675**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5926	5500	5000	125.9	116	80	120				
Barium	4679	500	5000		93.6	80	120				

Sample ID: **1711K58-001AMS** Client ID: **RDCS-34** Units: **mg/Kg-dry** Prep Date: **11/21/2017** Run No: **357505**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251899** Analysis Date: **11/21/2017** Seq No: **7878680**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.32	4.815		111	75	125				
Barium	17.56	9.63	4.815	13.42	86.1	75	125				

Sample ID: **1711K58-001AMSD** Client ID: **RDCS-34** Units: **mg/Kg-dry** Prep Date: **11/21/2017** Run No: **357505**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251899** Analysis Date: **11/21/2017** Seq No: **7878682**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.33	4.824		106	75	125	5.320	0	20	
Barium	16.80	9.65	4.824	13.42	70.3	75	125	17.56	4.41	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

July 14, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1707931

Analytical Environmental Services, Inc. received 6 samples on 7/13/2017 10:25:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1707931

Date: 7/12/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B 10185 Atlanta GA 30308
PHONE: 770 296 9648	EMAIL: forrest.howard@RestoNetcon.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: CPA 6020 As Ba	PRESERVATION (see codes): H	REMARKS	Number of Containers
1	CS-15C (FH)	6/27/17	0932	X		SO		X		1
2	SWCS-15C-1.5	6/27/17	1030	X		SO		X		1
3	SWCS-15C-4.0	6/27/17	1031	X		SO		X		1
4	CS-15A	6/27/17	1505	X		SO		X		1
5	SWCS-15A-1.5	6/27/17	1508	X		SO		X		1
6	SWCS-15A-4.0	6/27/17	1510	X		SO		X		1
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	7/12/17 1730	1. To Fedex	
2.		2.	7/13/17 10:25
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: ~~COC~~ (FH)
Report to: Stephen Wilson
Trent Godwin
Forrest Howard
Lee Miller
Nick Heuman

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other:

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 ~~Bee~~ Crossgate Rd Portwentworth GA
SEND REPORT TO: ~~Bee~~ In comments
INVOICE TO: GPC Environmental Affairs (IF DIFFERENT FROM ABOVE)
sent w/ AES Fedex account
QUOTE #: PO#:

RECEIPT
Total # of Containers: 6

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 14-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	CS-15C
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/27/2017 9:32:00 AM
Lab ID:	1707931-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.51		mg/Kg-dry	244984	5	07/13/2017 20:56	JR
Barium	67.4	1.84		mg/Kg-dry	244984	5	07/13/2017 20:56	JR
PERCENT MOISTURE D2216								
Percent Moisture	24.2	0		wt%	R347521	1	07/13/2017 18:02	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 14-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	SWCS-15C-1.5
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/27/2017 10:30:00 AM
Lab ID:	1707931-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	4.29		mg/Kg-dry	244984	5	07/13/2017 21:02	JR
Barium	25.1	1.43		mg/Kg-dry	244984	5	07/13/2017 21:02	JR
PERCENT MOISTURE D2216								
Percent Moisture	6.74	0		wt%	R347521	1	07/13/2017 18:02	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 14-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	SWCS-15C-4.0
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/27/2017 10:31:00 AM
Lab ID:	1707931-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	105	41.3		mg/Kg-dry	244984	5	07/13/2017 21:08	JR
Barium	833	2.75		mg/Kg-dry	244984	5	07/13/2017 21:08	JR
PERCENT MOISTURE D2216								
Percent Moisture	29.6	0		wt%	R347521	1	07/13/2017 18:02	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 14-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	CS-15A
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/27/2017 3:05:00 PM
Lab ID:	1707931-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.67		mg/Kg-dry	244984	5	07/13/2017 21:14	JR
Barium	38.0	2.89		mg/Kg-dry	244984	5	07/13/2017 21:14	JR
PERCENT MOISTURE D2216								
Percent Moisture	15.6	0		wt%	R347521	1	07/13/2017 18:02	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 14-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	SWCS-15A-1.5
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/27/2017 3:08:00 PM
Lab ID:	1707931-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.93		mg/Kg-dry	244984	5	07/13/2017 21:20	JR
Barium	12.4	2.31		mg/Kg-dry	244984	5	07/13/2017 21:20	JR
PERCENT MOISTURE D2216								
Percent Moisture	7.55	0		wt%	R347521	1	07/13/2017 18:02	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 14-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	SWCS-15A-4.0
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/27/2017 3:10:00 PM
Lab ID:	1707931-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	43.1	38.6		mg/Kg-dry	244984	5	07/13/2017 21:27	JR
Barium	701	2.57		mg/Kg-dry	244984	5	07/13/2017 21:27	JR
PERCENT MOISTURE D2216								
Percent Moisture	26.5	0		wt%	R347521	1	07/13/2017 18:02	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1707931**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	◉	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 0.3 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 7/13/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 7/13/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 7/13/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1707931

ANALYTICAL QC SUMMARY REPORT

BatchID: 244984

Sample ID: **MB-244984** Client ID: Units: **ug/Kg** Prep Date: **07/12/2017** Run No: **347435**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **244984** Analysis Date: **07/12/2017** Seq No: **7630553**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-244984** Client ID: Units: **ug/Kg** Prep Date: **07/12/2017** Run No: **347435**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **244984** Analysis Date: **07/12/2017** Seq No: **7630554**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4262	4000	5000		85.2	80	120				
Barium	4933	500	5000		98.7	80	120				

Sample ID: **1707771-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **07/12/2017** Run No: **347435**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **244984** Analysis Date: **07/12/2017** Seq No: **7630556**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	15580	8040	5362	11490	76.3	75	125				
Barium	122700	536	5362	122100	10.5	75	125				S

Sample ID: **1707771-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **07/12/2017** Run No: **347435**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **244984** Analysis Date: **07/12/2017** Seq No: **7630557**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	16630	8050	5367	11490	95.9	75	125	15580	6.56	20	
Barium	127200	537	5367	122100	93.6	75	125	122700	3.57	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 10, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708897

Analytical Environmental Services, Inc. received 4 samples on 8/9/2017 11:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708897

Date: 8/9/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185
PHONE: 770-296-9648	EMAIL: Forrest.howard@Resktechnician
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 As Ba	ANALYSIS REQUESTED: TPH - DRO	PRESERVATION (see codes): I	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	DCS-01-N	8/8/17	1525	X		SO	X	X				1
2	DCS-01-E	8/8/17	1530	X		SO	X	X				1
3	DCS-01-S	8/8/17	1535	X		SO	X	X				1
4	DCS-01-W	8/8/17	1540	X		SO	X	X				1
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/8/17 1730	1. To Fedex	
2.		2.	8/9/17 1130
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Trent Godwin
Forrest Howard
Greg Millat
Nick Heuman

SHIPMENT METHOD
OUT: / / VIA:
IN: / VIA:
client FedEx UPS US mail courier Greyhound
other:

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Porthartharth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 4

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 15-Aug-17

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1708897

Case Narrative

Samples were analyzed for 8270 PAH's in addition to the analysis on the COC per Forrest Howard via phone on 8/9/2017.

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-N
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:25:00 PM
Lab ID:	1708897-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Benzo(b)fluoranthene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Benzo(a)pyrene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Indeno(1,2,3-cd)pyrene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Surr: 2-Fluorobiphenyl	79.9	53.3-120		%REC	246700	1	08/09/2017 18:45	RF
Surr: 4-Terphenyl-d14	92.7	61.2-120		%REC	246700	1	08/09/2017 18:45	RF
Surr: Nitrobenzene-d5	77.7	52.7-120		%REC	246700	1	08/09/2017 18:45	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.06		mg/Kg-dry	246708	1	08/09/2017 22:22	JR
Barium	30.1	0.54		mg/Kg-dry	246708	1	08/09/2017 22:22	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.5		mg/Kg-dry	246699	1	08/09/2017 17:54	RF
Surr: Dioctylphthalate	71.1	54.5-121		%REC	246699	1	08/09/2017 17:54	RF
PERCENT MOISTURE D2216								
Percent Moisture	10.6	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-E
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:30:00 PM
Lab ID:	1708897-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Benzo(a)pyrene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Surr: 2-Fluorobiphenyl	73.7	53.3-120		%REC	246700	1	08/09/2017 19:08	RF
Surr: 4-Terphenyl-d14	86.5	61.2-120		%REC	246700	1	08/09/2017 19:08	RF
Surr: Nitrobenzene-d5	74.2	52.7-120		%REC	246700	1	08/09/2017 19:08	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.54		mg/Kg-dry	246708	1	08/09/2017 22:53	JR
Barium	38.0	0.50		mg/Kg-dry	246708	1	08/09/2017 22:53	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.9		mg/Kg-dry	246699	1	08/09/2017 18:24	RF
Surr: Dioctylphthalate	85.9	54.5-121		%REC	246699	1	08/09/2017 18:24	RF
PERCENT MOISTURE D2216								
Percent Moisture	15.1	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-S
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:35:00 PM
Lab ID:	1708897-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Benzo(b)fluoranthene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Benzo(a)pyrene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Indeno(1,2,3-cd)pyrene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Surr: 2-Fluorobiphenyl	78.2	53.3-120		%REC	246700	1	08/10/2017 09:27	RF
Surr: 4-Terphenyl-d14	88.5	61.2-120		%REC	246700	1	08/10/2017 09:27	RF
Surr: Nitrobenzene-d5	71.8	52.7-120		%REC	246700	1	08/10/2017 09:27	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.76		mg/Kg-dry	246708	1	08/09/2017 22:59	JR
Barium	37.0	0.52		mg/Kg-dry	246708	1	08/09/2017 22:59	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.3		mg/Kg-dry	246699	1	08/09/2017 18:53	RF
Surr: Dioctylphthalate	72.9	54.5-121		%REC	246699	1	08/09/2017 18:53	RF
PERCENT MOISTURE D2216								
Percent Moisture	19.3	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-W
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:40:00 PM
Lab ID:	1708897-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Benzo(b)fluoranthene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Benzo(a)pyrene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Indeno(1,2,3-cd)pyrene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Surr: 2-Fluorobiphenyl	79.4	53.3-120		%REC	246700	1	08/09/2017 19:54	RF
Surr: 4-Terphenyl-d14	86.9	61.2-120		%REC	246700	1	08/09/2017 19:54	RF
Surr: Nitrobenzene-d5	75.8	52.7-120		%REC	246700	1	08/09/2017 19:54	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.63		mg/Kg-dry	246708	1	08/09/2017 23:05	JR
Barium	126	0.58		mg/Kg-dry	246708	1	08/09/2017 23:05	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.5		mg/Kg-dry	246699	1	08/09/2017 19:23	RF
Surr: Dioctylphthalate	84.3	54.5-121		%REC	246699	1	08/09/2017 19:23	RF
PERCENT MOISTURE D2216								
Percent Moisture	20.9	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708897

ANALYTICAL QC SUMMARY REPORT

BatchID: 246699

Sample ID: **MB-246699**	Client ID:			Units: **mg/Kg**	Prep Date: **08/09/2017**	Run No: **349425**
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **246699**	Analysis Date: **08/09/2017**	Seq No: **7678971**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	3.012	0	3.300		91.3	54.5	121				

Sample ID: **LCS-246699**	Client ID:			Units: **mg/Kg**	Prep Date: **08/09/2017**	Run No: **349425**
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **246699**	Analysis Date: **08/09/2017**	Seq No: **7678972**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	35.14	6.7	33.30		106	54.6	120				
Surr: Dioctylphthalate	3.054	0	3.330		91.7	54.5	121				

Sample ID: **1708897-001AMS**	Client ID: **DCS-01-N**			Units: **mg/Kg-dry**	Prep Date: **08/09/2017**	Run No: **349425**
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **246699**	Analysis Date: **08/09/2017**	Seq No: **7678977**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	36.04	7.5	37.24		96.8	40.6	122				
Surr: Dioctylphthalate	3.120	0	3.724		83.8	54.5	121				

Sample ID: **1708897-001AMSD**	Client ID: **DCS-01-N**			Units: **mg/Kg-dry**	Prep Date: **08/09/2017**	Run No: **349425**
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **246699**	Analysis Date: **08/09/2017**	Seq No: **7678978**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	37.67	7.5	37.24		101	40.6	122	36.04	4.41	29.9	
Surr: Dioctylphthalate	3.254	0	3.724		87.4	54.5	121	3.120	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708897

ANALYTICAL QC SUMMARY REPORT

BatchID: 246700

Sample ID: **MB-246700** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349387**
SampleType: **MBLK** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/09/2017** Seq No: **7678140**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benz(a)anthracene	BRL	330									
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Surr: 2-Fluorobiphenyl	1310	0	1667		78.6	53.3	120				
Surr: 4-Terphenyl-d14	1416	0	1667		85.0	61.2	120				
Surr: Nitrobenzene-d5	1338	0	1667		80.3	52.7	120				

Sample ID: **LCS-246700** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349387**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/09/2017** Seq No: **7678141**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benz(a)anthracene	1487	330	1667		89.2	70	120				
Benzo(a)pyrene	1400	330	1667		84.0	70	120				
Benzo(b)fluoranthene	1490	330	1667		89.4	70	120				
Indeno(1,2,3-cd)pyrene	1867	330	1667		112	70	120				
Surr: 2-Fluorobiphenyl	1478	0	1667		88.7	53.3	120				
Surr: 4-Terphenyl-d14	1507	0	1667		90.4	61.2	120				
Surr: Nitrobenzene-d5	1422	0	1667		85.3	52.7	120				

Sample ID: **1708897-002AMS** Client ID: **DCS-01-E** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349428**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/10/2017** Seq No: **7678906**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benz(a)anthracene	1599	390	1964		81.4	68.5	120				
Benzo(a)pyrene	1481	390	1964		75.4	67	120				
Benzo(b)fluoranthene	1547	390	1964		78.8	68.3	120				
Indeno(1,2,3-cd)pyrene	1495	390	1964		76.1	58.4	119				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708897

ANALYTICAL QC SUMMARY REPORT

BatchID: 246700

Sample ID: **1708897-002AMS** Client ID: **DCS-01-E** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349428**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/10/2017** Seq No: **7678906**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 2-Fluorobiphenyl	1445	0	1964		73.6	53.3	120				
Surr: 4-Terphenyl-d14	1600	0	1964		81.4	61.2	120				
Surr: Nitrobenzene-d5	1374	0	1964		70.0	52.7	120				

Sample ID: **1708897-002AMSD** Client ID: **DCS-01-E** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349387**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/09/2017** Seq No: **7678147**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benz(a)anthracene	1709	390	1964		87.0	68.5	120	1885	9.76	19.1	
Benzo(a)pyrene	1645	390	1964		83.7	67	120	1745	5.90	20	
Benzo(b)fluoranthene	1696	390	1964		86.4	68.3	120	1823	7.23	19.8	
Indeno(1,2,3-cd)pyrene	1644	390	1964		83.7	58.4	119	1762	6.93	18.6	
Surr: 2-Fluorobiphenyl	1449	0	1964		73.8	53.3	120	1703	0	0	
Surr: 4-Terphenyl-d14	1735	0	1964		88.4	61.2	120	1885	0	0	
Surr: Nitrobenzene-d5	1593	0	1964		81.1	52.7	120	1619	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708897

ANALYTICAL QC SUMMARY REPORT

BatchID: 246708

Sample ID: **MB-246708** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678588**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246708** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678589**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4688	1500	5000		93.8	80	120				
Barium	5135	500	5000		103	80	120				

Sample ID: **1708897-001AMS** Client ID: **DCS-01-N** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678591**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8060	5371	1234	74.6	75	125				S
Barium	39300	537	5371	30050	172	75	125				S

Sample ID: **1708897-001AMSD** Client ID: **DCS-01-N** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678592**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8050	5370	1234	71.1	75	125	5243	0	20	S
Barium	41820	537	5370	30050	219	75	125	39300	6.23	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 10, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708897

Analytical Environmental Services, Inc. received 4 samples on 8/9/2017 11:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708897

Date: 8/9/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185
PHONE: 770-296-9648	EMAIL: Forrest.howard@Resktechnician
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 As Ba	ANALYSIS REQUESTED: TPH - DRO	PRESERVATION (see codes): I	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	DCS-01-N	8/8/17	1525	X		SO	X	X				1
2	DCS-01-E	8/8/17	1530	X		SO	X	X				1
3	DCS-01-S	8/8/17	1535	X		SO	X	X				1
4	DCS-01-W	8/8/17	1540	X		SO	X	X				1
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/8/17 1730	1. To Fedex	
2.		2.	8/9/17 1130
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Trent Godwin
Forrest Howard
Greg Millat
Nick Heuman

SHIPMENT METHOD
OUT: / / VIA:
IN: / VIA:
client FedEx UPS US mail courier Greyhound
other:

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Porthartharth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 4

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 15-Aug-17

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1708897

Case Narrative

Samples were analyzed for 8270 PAH's in addition to the analysis on the COC per Forrest Howard via phone on 8/9/2017.

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-N
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:25:00 PM
Lab ID:	1708897-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Benzo(b)fluoranthene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Benzo(a)pyrene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Indeno(1,2,3-cd)pyrene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Surr: 2-Fluorobiphenyl	79.9	53.3-120		%REC	246700	1	08/09/2017 18:45	RF
Surr: 4-Terphenyl-d14	92.7	61.2-120		%REC	246700	1	08/09/2017 18:45	RF
Surr: Nitrobenzene-d5	77.7	52.7-120		%REC	246700	1	08/09/2017 18:45	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.06		mg/Kg-dry	246708	1	08/09/2017 22:22	JR
Barium	30.1	0.54		mg/Kg-dry	246708	1	08/09/2017 22:22	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.5		mg/Kg-dry	246699	1	08/09/2017 17:54	RF
Surr: Dioctylphthalate	71.1	54.5-121		%REC	246699	1	08/09/2017 17:54	RF
PERCENT MOISTURE D2216								
Percent Moisture	10.6	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-E
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:30:00 PM
Lab ID:	1708897-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Benzo(a)pyrene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Surr: 2-Fluorobiphenyl	73.7	53.3-120		%REC	246700	1	08/09/2017 19:08	RF
Surr: 4-Terphenyl-d14	86.5	61.2-120		%REC	246700	1	08/09/2017 19:08	RF
Surr: Nitrobenzene-d5	74.2	52.7-120		%REC	246700	1	08/09/2017 19:08	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.54		mg/Kg-dry	246708	1	08/09/2017 22:53	JR
Barium	38.0	0.50		mg/Kg-dry	246708	1	08/09/2017 22:53	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.9		mg/Kg-dry	246699	1	08/09/2017 18:24	RF
Surr: Dioctylphthalate	85.9	54.5-121		%REC	246699	1	08/09/2017 18:24	RF
PERCENT MOISTURE D2216								
Percent Moisture	15.1	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-S
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:35:00 PM
Lab ID:	1708897-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Benzo(b)fluoranthene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Benzo(a)pyrene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Indeno(1,2,3-cd)pyrene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Surr: 2-Fluorobiphenyl	78.2	53.3-120		%REC	246700	1	08/10/2017 09:27	RF
Surr: 4-Terphenyl-d14	88.5	61.2-120		%REC	246700	1	08/10/2017 09:27	RF
Surr: Nitrobenzene-d5	71.8	52.7-120		%REC	246700	1	08/10/2017 09:27	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.76		mg/Kg-dry	246708	1	08/09/2017 22:59	JR
Barium	37.0	0.52		mg/Kg-dry	246708	1	08/09/2017 22:59	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.3		mg/Kg-dry	246699	1	08/09/2017 18:53	RF
Surr: Dioctylphthalate	72.9	54.5-121		%REC	246699	1	08/09/2017 18:53	RF
PERCENT MOISTURE D2216								
Percent Moisture	19.3	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-W
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:40:00 PM
Lab ID:	1708897-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Benzo(b)fluoranthene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Benzo(a)pyrene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Indeno(1,2,3-cd)pyrene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Surr: 2-Fluorobiphenyl	79.4	53.3-120		%REC	246700	1	08/09/2017 19:54	RF
Surr: 4-Terphenyl-d14	86.9	61.2-120		%REC	246700	1	08/09/2017 19:54	RF
Surr: Nitrobenzene-d5	75.8	52.7-120		%REC	246700	1	08/09/2017 19:54	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.63		mg/Kg-dry	246708	1	08/09/2017 23:05	JR
Barium	126	0.58		mg/Kg-dry	246708	1	08/09/2017 23:05	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.5		mg/Kg-dry	246699	1	08/09/2017 19:23	RF
Surr: Dioctylphthalate	84.3	54.5-121		%REC	246699	1	08/09/2017 19:23	RF
PERCENT MOISTURE D2216								
Percent Moisture	20.9	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708897

ANALYTICAL QC SUMMARY REPORT

BatchID: 246699

Sample ID: **MB-246699**	Client ID:			Units: **mg/Kg**	Prep Date: **08/09/2017**	Run No: **349425**
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **246699**	Analysis Date: **08/09/2017**	Seq No: **7678971**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	3.012	0	3.300		91.3	54.5	121				

Sample ID: **LCS-246699**	Client ID:			Units: **mg/Kg**	Prep Date: **08/09/2017**	Run No: **349425**
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **246699**	Analysis Date: **08/09/2017**	Seq No: **7678972**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	35.14	6.7	33.30		106	54.6	120				
Surr: Dioctylphthalate	3.054	0	3.330		91.7	54.5	121				

Sample ID: **1708897-001AMS**	Client ID: **DCS-01-N**			Units: **mg/Kg-dry**	Prep Date: **08/09/2017**	Run No: **349425**
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **246699**	Analysis Date: **08/09/2017**	Seq No: **7678977**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	36.04	7.5	37.24		96.8	40.6	122				
Surr: Dioctylphthalate	3.120	0	3.724		83.8	54.5	121				

Sample ID: **1708897-001AMSD**	Client ID: **DCS-01-N**			Units: **mg/Kg-dry**	Prep Date: **08/09/2017**	Run No: **349425**
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **246699**	Analysis Date: **08/09/2017**	Seq No: **7678978**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	37.67	7.5	37.24		101	40.6	122	36.04	4.41	29.9	
Surr: Dioctylphthalate	3.254	0	3.724		87.4	54.5	121	3.120	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708897

ANALYTICAL QC SUMMARY REPORT

BatchID: 246700

Sample ID: **MB-246700** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349387**
SampleType: **MBLK** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/09/2017** Seq No: **7678140**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benz(a)anthracene	BRL	330									
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Surr: 2-Fluorobiphenyl	1310	0	1667		78.6	53.3	120				
Surr: 4-Terphenyl-d14	1416	0	1667		85.0	61.2	120				
Surr: Nitrobenzene-d5	1338	0	1667		80.3	52.7	120				

Sample ID: **LCS-246700** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349387**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/09/2017** Seq No: **7678141**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benz(a)anthracene	1487	330	1667		89.2	70	120				
Benzo(a)pyrene	1400	330	1667		84.0	70	120				
Benzo(b)fluoranthene	1490	330	1667		89.4	70	120				
Indeno(1,2,3-cd)pyrene	1867	330	1667		112	70	120				
Surr: 2-Fluorobiphenyl	1478	0	1667		88.7	53.3	120				
Surr: 4-Terphenyl-d14	1507	0	1667		90.4	61.2	120				
Surr: Nitrobenzene-d5	1422	0	1667		85.3	52.7	120				

Sample ID: **1708897-002AMS** Client ID: **DCS-01-E** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349428**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/10/2017** Seq No: **7678906**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benz(a)anthracene	1599	390	1964		81.4	68.5	120				
Benzo(a)pyrene	1481	390	1964		75.4	67	120				
Benzo(b)fluoranthene	1547	390	1964		78.8	68.3	120				
Indeno(1,2,3-cd)pyrene	1495	390	1964		76.1	58.4	119				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708897

ANALYTICAL QC SUMMARY REPORT

BatchID: 246700

Sample ID: **1708897-002AMS** Client ID: **DCS-01-E** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349428**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/10/2017** Seq No: **7678906**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 2-Fluorobiphenyl	1445	0	1964		73.6	53.3	120				
Surr: 4-Terphenyl-d14	1600	0	1964		81.4	61.2	120				
Surr: Nitrobenzene-d5	1374	0	1964		70.0	52.7	120				

Sample ID: **1708897-002AMSD** Client ID: **DCS-01-E** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349387**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **246700** Analysis Date: **08/09/2017** Seq No: **7678147**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benz(a)anthracene	1709	390	1964		87.0	68.5	120	1885	9.76	19.1	
Benzo(a)pyrene	1645	390	1964		83.7	67	120	1745	5.90	20	
Benzo(b)fluoranthene	1696	390	1964		86.4	68.3	120	1823	7.23	19.8	
Indeno(1,2,3-cd)pyrene	1644	390	1964		83.7	58.4	119	1762	6.93	18.6	
Surr: 2-Fluorobiphenyl	1449	0	1964		73.8	53.3	120	1703	0	0	
Surr: 4-Terphenyl-d14	1735	0	1964		88.4	61.2	120	1885	0	0	
Surr: Nitrobenzene-d5	1593	0	1964		81.1	52.7	120	1619	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708897

ANALYTICAL QC SUMMARY REPORT

BatchID: 246708

Sample ID: **MB-246708** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678588**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246708** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678589**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4688	1500	5000		93.8	80	120				
Barium	5135	500	5000		103	80	120				

Sample ID: **1708897-001AMS** Client ID: **DCS-01-N** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678591**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8060	5371	1234	74.6	75	125				S
Barium	39300	537	5371	30050	172	75	125				S

Sample ID: **1708897-001AMSD** Client ID: **DCS-01-N** Units: **ug/Kg-dry** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678592**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8050	5370	1234	71.1	75	125	5243	0	20	S
Barium	41820	537	5370	30050	219	75	125	39300	6.23	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

November 06, 2017

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1711312

Analytical Environmental Services, Inc. received 19 samples on 11/3/2017 9:45:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 12/01/17.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1711312

Date: (FA) 11/2/17 ~~10/31/17~~ Page 1 of (KA) 2

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA, 30308
PHONE: 770-296-9648	EMAIL: forrest.howard@Resolute-env.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA6020 As Ba	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	LFCS-49	10/30/17	1000	X		SO	X	X		1
2	LFCS-50	10/30/17	1005	X		SO	X	X		1
3	LFCS-51	10/30/17	1010	X		SO	X	X		1
4	LFCS-52	10/30/17	1400	X		SO	X	X		1
5	LFCS-53	10/30/17	1405	X		SO	X	X		1
6	LFCS-54	10/30/17	1530	X		SO	X	X		1
7	LFCS-55	10/30/17	1535	X		SO	X	X		1
8	LFCS-56	10/31/17	1115	X		SO	X	X		1
9	LFCS-57	10/31/17	1345	X		SO	X	X		1
10	LFCS-58	11/1/17	1050	X		SO	X	X		1
11	LFCS-59	11/1/17	1655	X		SO	X	X		1
12	LFCS-60	11/1/17	1400	X		SO	X	X		1
13	LFCS-61	11/1/17	1605	X		SO	X	X		1
14	LFCS-62	11/1/17	1610	X		SO	X	X		1

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	11/2/17 1700	1. To Fedex	
2.		2. Pars Nasseri	11/03/17
3.		3.	9:45

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Forrest Howard
Kevin Stephensen
Trent Godwin
Stephen Wilsen
Lee Millet

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 cross gate Rd Rustwerthwath GA
SEND REPORT TO: in Comments
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental Affairs
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 14

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush **(auth req.)**
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1711312

Date: 11/2/17 Page 2 of 2

COMPANY:	ADDRESS:
PHONE:	EMAIL:
SAMPLED BY:	SIGNATURE:

ANALYSIS REQUESTED

PAH 8270 SIM

PRESERVATION (see codes)

H

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes) H	REMARKS	Number of Containers
1	LFCS-63	11/2/17	0814	X		SO	X		1
2	LFCS-64	11/2/17	0924	X		SO	X		1
3	LFCS-65	11/2/17	1230	X		SO	X		1
4	LFCS-66	11/2/17	1510	X		SO	X		
5	LFCS-67	11/2/17	1512	X		SO	X		
6									
7									
8									
9									
10									
11									
12									
13									
14									

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.		1. Pars Mosaadi	11/03/17 9:45
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT: / / VIA:

IN: / / VIA:

client (FedEx) UPS US mail courier Greyhound other: _____

PROJECT INFORMATION

PROJECT NAME:

PROJECT #:

SITE ADDRESS:

SEND REPORT TO:

INVOICE TO:
(IF DIFFERENT FROM ABOVE)

QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 3

Turnaround Time (TAT) Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush **(auth req.)**
- ☐ Other _____

STATE PROGRAM (if any): _____

E-mail? ☐ Fax? ☐

DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-49
Project Name:	Plant Kraft Excavation	**Collection Date:**	10/30/2017 10:00:00 AM
Lab ID:	1711312-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.24		mg/Kg-dry	250986	20	11/06/2017 00:46	TA
Barium	20.0	8.04		mg/Kg-dry	250986	20	11/06/2017 00:46	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.04	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-50
Project Name:	Plant Kraft Excavation	**Collection Date:**	10/30/2017 10:05:00 AM
Lab ID:	1711312-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.40		mg/Kg-dry	250986	20	11/06/2017 00:48	TA
Barium	18.5	8.22		mg/Kg-dry	250986	20	11/06/2017 00:48	TA
PERCENT MOISTURE D2216								
Percent Moisture	10.7	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-51
Project Name:	Plant Kraft Excavation	**Collection Date:**	10/30/2017 10:10:00 AM
Lab ID:	1711312-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.38		mg/Kg-dry	250986	20	11/06/2017 00:50	TA
Barium	45.6	9.97		mg/Kg-dry	250986	20	11/06/2017 00:50	TA
PERCENT MOISTURE D2216								
Percent Moisture	28.8	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-52
Project Name:	Plant Kraft Excavation	**Collection Date:**	10/30/2017 2:00:00 PM
Lab ID:	1711312-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.05		mg/Kg-dry	250986	20	11/06/2017 00:52	TA
Barium	39.5	10.1		mg/Kg-dry	250986	20	11/06/2017 00:52	TA
PERCENT MOISTURE D2216								
Percent Moisture	24.9	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-53
Project Name:	Plant Kraft Excavation	**Collection Date:**	10/30/2017 2:05:00 PM
Lab ID:	1711312-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.96		mg/Kg-dry	250986	20	11/06/2017 00:54	TA
Barium	9.65	7.73		mg/Kg-dry	250986	20	11/06/2017 00:54	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.84	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-54
Project Name:	Plant Kraft Excavation	**Collection Date:**	10/30/2017 3:30:00 PM
Lab ID:	1711312-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.00		mg/Kg-dry	250986	20	11/06/2017 00:55	TA
Barium	41.1	8.75		mg/Kg-dry	250986	20	11/06/2017 00:55	TA
PERCENT MOISTURE D2216								
Percent Moisture	14.6	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-55
Project Name:	Plant Kraft Excavation	**Collection Date:**	10/30/2017 3:35:00 PM
Lab ID:	1711312-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.17		mg/Kg-dry	250986	20	11/06/2017 00:57	TA
Barium	11.4	7.96		mg/Kg-dry	250986	20	11/06/2017 00:57	TA
PERCENT MOISTURE D2216								
Percent Moisture	10.4	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-56
Project Name:	Plant Kraft Excavation	**Collection Date:**	10/31/2017 11:15:00 AM
Lab ID:	1711312-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.87		mg/Kg-dry	250986	20	11/06/2017 00:59	TA
Barium	12.1	7.63		mg/Kg-dry	250986	20	11/06/2017 00:59	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.50	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-57
Project Name:	Plant Kraft Excavation	**Collection Date:**	10/31/2017 1:45:00 PM
Lab ID:	1711312-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.82		mg/Kg-dry	250986	20	11/06/2017 01:06	TA
Barium	19.9	7.57		mg/Kg-dry	250986	20	11/06/2017 01:06	TA
PERCENT MOISTURE D2216								
Percent Moisture	4.46	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-58
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/1/2017 10:50:00 AM
Lab ID:	1711312-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.42		mg/Kg-dry	250986	20	11/06/2017 01:08	TA
Barium	37.9	8.33		mg/Kg-dry	250986	20	11/06/2017 01:08	TA
PERCENT MOISTURE D2216								
Percent Moisture	14.9	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-59
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/1/2017 10:55:00 AM
Lab ID:	1711312-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.82		mg/Kg-dry	250986	20	11/06/2017 01:10	TA
Barium	10.6	7.58		mg/Kg-dry	250986	20	11/06/2017 01:10	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.35	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-60
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/1/2017 2:00:00 PM
Lab ID:	1711312-012	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	8.18	7.34		mg/Kg-dry	250986	20	11/06/2017 01:12	TA
Barium	51.6	8.54		mg/Kg-dry	250986	20	11/06/2017 01:12	TA
PERCENT MOISTURE D2216								
Percent Moisture	11.6	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-61
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/1/2017 4:05:00 PM
Lab ID:	1711312-013	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.93		mg/Kg-dry	250986	20	11/06/2017 01:14	TA
Barium	24.5	7.70		mg/Kg-dry	250986	20	11/06/2017 01:14	TA
PERCENT MOISTURE D2216								
Percent Moisture	5.86	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-62
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/1/2017 4:10:00 PM
Lab ID:	1711312-014	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.05		mg/Kg-dry	250986	20	11/06/2017 01:16	TA
Barium	36.9	7.83		mg/Kg-dry	250986	20	11/06/2017 01:16	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.89	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-63
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/2/2017 8:14:00 AM
Lab ID:	1711312-015	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.26		mg/Kg-dry	250986	20	11/06/2017 01:18	TA
Barium	33.7	8.85		mg/Kg-dry	250986	20	11/06/2017 01:18	TA
PERCENT MOISTURE D2216								
Percent Moisture	19.1	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-64
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/2/2017 9:24:00 AM
Lab ID:	1711312-016	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.17		mg/Kg-dry	250986	20	11/06/2017 01:19	TA
Barium	12.5	7.97		mg/Kg-dry	250986	20	11/06/2017 01:19	TA
PERCENT MOISTURE D2216								
Percent Moisture	10.6	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-65
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/2/2017 12:30:00 PM
Lab ID:	1711312-017	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.22		mg/Kg-dry	250986	20	11/06/2017 01:21	TA
Barium	13.4	8.02		mg/Kg-dry	250986	20	11/06/2017 01:21	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.78	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-66
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/2/2017 3:10:00 PM
Lab ID:	1711312-018	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.47		mg/Kg-dry	250986	20	11/06/2017 01:23	TA
Barium	43.0	8.49		mg/Kg-dry	250986	20	11/06/2017 01:23	TA
PERCENT MOISTURE D2216								
Percent Moisture	9.43	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 6-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-67
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/2/2017 3:12:00 PM
Lab ID:	1711312-019	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.41		mg/Kg-dry	250986	20	11/06/2017 01:30	TA
Barium	22.6	8.23		mg/Kg-dry	250986	20	11/06/2017 01:30	TA
PERCENT MOISTURE D2216								
Percent Moisture	9.08	0		wt%	R356115	1	11/06/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1711312

ANALYTICAL QC SUMMARY REPORT

BatchID: 250986

Sample ID: **MB-250986** Client ID: Units: **ug/Kg** Prep Date: **11/03/2017** Run No: **356126**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **250986** Analysis Date: **11/06/2017** Seq No: **7844494**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-250986** Client ID: Units: **ug/Kg** Prep Date: **11/03/2017** Run No: **356126**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **250986** Analysis Date: **11/06/2017** Seq No: **7844495**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4029	4000	5000		80.6	80	120				
Barium	4602	500	5000		92.0	80	120				

Sample ID: **1711029-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **11/03/2017** Run No: **356126**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **250986** Analysis Date: **11/06/2017** Seq No: **7844497**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.841	5.72	4.084	1.970	94.8	75	125				
Barium	29.74	8.17	4.084	20.51	226	75	125				S

Sample ID: **1711029-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/03/2017** Run No: **356126**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **250986** Analysis Date: **11/06/2017** Seq No: **7844498**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.876	5.69	4.068	1.970	96.0	75	125	5.841	0.593	20	
Barium	27.76	8.14	4.068	20.51	178	75	125	29.74	6.90	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 10, 2017

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1711867

Analytical Environmental Services, Inc. received 22 samples on 11/9/2017 10:15:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 12/01/17.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1711967

Date: 11/8/17 Page 1 of 2

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308
PHONE: 678-548-9415	EMAIL: Kevin.Stephenson@Ramboll.com
SAMPLED BY: Kevin Stephenson	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes) I	ANALYSIS REQUESTED: Ra226/228	REMARKS	Number of Containers
1	LFCS-68	11/3/17	0855	X		SO	1			1
2	LFCS-69	11/3/17	0903	X		SO	1			1
3	LFCS-70	11/3/17	1202	X		SO	1			1
4	LFCS-71	11/6/17	0944	X		SO	1			1
5	LFCS-72	11/6/17	0952	X		SO	1			1
6	LFCS-73	11/6/17	0956	X		SO	1			1
7	LFCS-74	11/6/17	1002	X		SO	1			1
8	LFCS-75	11/6/17	1014	X		SO	1			1
9	LFCS-76	11/6/17	1018	X		SO	1			1
10	LFCS-77	11/6/17	1034	X		SO	1			1
11	LFCS-78	11/6/17	1216	X		SO	1			1
12	LFCS-79	11/6/17	1228	X		SO	1			1
13	LFCS-80	11/6/17	1326	X		SO	1			1
14	LFCS-81	11/6/17	1454	X		SO	1			1

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.		1.	11/9/17 10:15
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:
Report to:
Forrest Howard
Kevin Stephenson
Trudy Godwin
Stephen Wilson
Lucy Mullett

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Expansion
PROJECT #:
SITE ADDRESS: 155 Crossgate Road Port Wentworth GA
SEND REPORT TO:
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental Affairs

QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 14

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☑ Next Business Day Rush
- ☐ Same-Day Rush **(auth req.)**
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1711867

Date: 11/8/17 Page 2 of 2

COMPANY: Georgia Power Company

ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308

PHONE: 678-548-9415

EMAIL: kwood3@southernco.com

SAMPLED BY: Kevin Steplewood

SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	LFCS-82	11/6/17	1548	X		SO	I		1
2	LFCS-83	11/7/17	0756	X		SO	I		1
3	LFCS-84	11/7/17	1024	X		SO	I		1
4	LFCS-85	11/7/17	1236	X		SO	I		1
5	LFCS-86	11/7/17	1556	X		SO	I		1
6	LFCS-87	11/8/17	0840	X		SO	I		1
7	LFCS-88	11/8/17	1232	X		SO	I		1
8	LFCS-89	11/8/17	1458	X		SO	I		1
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED: Arsenic, Boron

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY: DATE/TIME:
1.
2.
3.

RECEIVED BY: DATE/TIME:
1. 11/9/17 10:15
2.
3.

SPECIAL INSTRUCTIONS/COMMENTS: Report to: Forrest Howard, Kevin Steplewood, Frank Godbold, Stephen Wilson, Lee McNeal

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other:

PROJECT INFORMATION
PROJECT NAME: Plant Knox Excavation
PROJECT #:
SITE ADDRESS: 155 Creosote Road, Port Wentworth
SEND REPORT TO:
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental Affairs
QUOTE #: PO#:

RECEIPT
Total # of Containers: 8

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-68
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/3/2017 8:55:00 AM
Lab ID:	1711867-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.30		mg/Kg-dry	251150	20	11/10/2017 05:15	TA
Barium	12.6	7.87		mg/Kg-dry	251150	20	11/10/2017 05:15	TA
PERCENT MOISTURE D2216								
Percent Moisture	10.5	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-69
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/3/2017 9:03:00 AM
Lab ID:	1711867-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.45		mg/Kg-dry	251150	20	11/10/2017 05:17	TA
Barium	19.9	8.06		mg/Kg-dry	251150	20	11/10/2017 05:17	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.01	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-70
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/3/2017 12:02:00 PM
Lab ID:	1711867-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.44		mg/Kg-dry	251293	20	11/10/2017 10:10	TA
Barium	6.72	0.93		mg/Kg-dry	251293	20	11/10/2017 10:10	TA
PERCENT MOISTURE D2216								
Percent Moisture	5.26	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-71
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 9:44:00 AM
Lab ID:	1711867-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.49		mg/Kg-dry	251293	20	11/10/2017 10:12	TA
Barium	10.0	7.49		mg/Kg-dry	251293	20	11/10/2017 10:12	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.02	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-72
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 9:52:00 AM
Lab ID:	1711867-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.67		mg/Kg-dry	251293	20	11/10/2017 10:14	TA
Barium	9.39	6.67		mg/Kg-dry	251293	20	11/10/2017 10:14	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.50	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-73
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 9:56:00 AM
Lab ID:	1711867-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.24		mg/Kg-dry	251293	20	11/10/2017 10:43	TA
Barium	17.7	7.80		mg/Kg-dry	251293	20	11/10/2017 10:43	TA
PERCENT MOISTURE D2216								
Percent Moisture	10.1	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-74
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 10:02:00 AM
Lab ID:	1711867-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.18		mg/Kg-dry	251293	20	11/10/2017 10:45	TA
Barium	14.2	7.97		mg/Kg-dry	251293	20	11/10/2017 10:45	TA
PERCENT MOISTURE D2216								
Percent Moisture	4.91	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-75
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 10:14:00 AM
Lab ID:	1711867-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.31		mg/Kg-dry	251293	20	11/10/2017 10:47	TA
Barium	5.08	0.66		mg/Kg-dry	251293	20	11/10/2017 10:47	TA
PERCENT MOISTURE D2216								
Percent Moisture	3.65	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-76
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 10:18:00 AM
Lab ID:	1711867-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.94		mg/Kg-dry	251293	20	11/10/2017 10:49	TA
Barium	31.4	8.26		mg/Kg-dry	251293	20	11/10/2017 10:49	TA
PERCENT MOISTURE D2216								
Percent Moisture	10.1	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-77
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 10:34:00 AM
Lab ID:	1711867-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.10		mg/Kg-dry	251293	20	11/10/2017 10:50	TA
Barium	11.3	10.1		mg/Kg-dry	251293	20	11/10/2017 10:50	TA
PERCENT MOISTURE D2216								
Percent Moisture	8.42	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-78
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 12:16:00 PM
Lab ID:	1711867-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.44		mg/Kg-dry	251293	20	11/10/2017 10:52	TA
Barium	15.5	9.30		mg/Kg-dry	251293	20	11/10/2017 10:52	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.88	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-79
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 12:28:00 PM
Lab ID:	1711867-012	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.15		mg/Kg-dry	251293	20	11/10/2017 10:54	TA
Barium	4.78	0.89		mg/Kg-dry	251293	20	11/10/2017 10:54	TA
PERCENT MOISTURE D2216								
Percent Moisture	3.59	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-80
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 1:26:00 PM
Lab ID:	1711867-013	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.37		mg/Kg-dry	251293	20	11/10/2017 10:56	TA
Barium	9.92	9.21		mg/Kg-dry	251293	20	11/10/2017 10:56	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.17	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-81
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 2:54:00 PM
Lab ID:	1711867-014	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.00		mg/Kg-dry	251293	20	11/10/2017 10:58	TA
Barium	9.73	6.36		mg/Kg-dry	251293	20	11/10/2017 10:58	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.06	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-82
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/6/2017 3:48:00 PM
Lab ID:	1711867-015	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.27		mg/Kg-dry	251293	20	11/10/2017 11:00	TA
Barium	6.01	1.03		mg/Kg-dry	251293	20	11/10/2017 11:00	TA
PERCENT MOISTURE D2216								
Percent Moisture	5.15	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-83
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/7/2017 7:56:00 AM
Lab ID:	1711867-016	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.29		mg/Kg-dry	251293	20	11/10/2017 11:12	TA
Barium	8.88	1.04		mg/Kg-dry	251293	20	11/10/2017 11:12	TA
PERCENT MOISTURE D2216								
Percent Moisture	5.87	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-84
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/7/2017 10:24:00 AM
Lab ID:	1711867-017	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.28		mg/Kg-dry	251293	20	11/10/2017 11:14	TA
Barium	12.7	6.62		mg/Kg-dry	251293	20	11/10/2017 11:14	TA
PERCENT MOISTURE D2216								
Percent Moisture	9.86	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-85
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/7/2017 12:36:00 PM
Lab ID:	1711867-018	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.14		mg/Kg-dry	251293	20	11/10/2017 11:16	TA
Barium	19.7	8.11		mg/Kg-dry	251293	20	11/10/2017 11:16	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.56	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-86
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/7/2017 3:56:00 PM
Lab ID:	1711867-019	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.68		mg/Kg-dry	251293	20	11/10/2017 11:18	TA
Barium	18.6	8.35		mg/Kg-dry	251293	20	11/10/2017 11:18	TA
PERCENT MOISTURE D2216								
Percent Moisture	10.4	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-87
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/8/2017 8:40:00 AM
Lab ID:	1711867-020	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.19		mg/Kg-dry	251293	20	11/10/2017 11:20	TA
Barium	5.84	0.65		mg/Kg-dry	251293	20	11/10/2017 11:20	TA
PERCENT MOISTURE D2216								
Percent Moisture	3.38	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-88
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/8/2017 12:32:00 PM
Lab ID:	1711867-021	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.35		mg/Kg-dry	251293	20	11/10/2017 11:21	TA
Barium	8.59	0.92		mg/Kg-dry	251293	20	11/10/2017 11:21	TA
PERCENT MOISTURE D2216								
Percent Moisture	4.42	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Nov-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-89
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/8/2017 2:58:00 PM
Lab ID:	1711867-022	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.38		mg/Kg-dry	251293	20	11/10/2017 10:01	TA
Barium	10.4	9.22		mg/Kg-dry	251293	20	11/10/2017 10:01	TA
PERCENT MOISTURE D2216								
Percent Moisture	7.55	0		wt%	R356562	1	11/10/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1711867**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	◉	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	◉	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 0.7 °C Cooler 2 Temperature 0.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 11/9/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). MA 11/9/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). MA 11/9/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1711867

ANALYTICAL QC SUMMARY REPORT

BatchID: 251150

Sample ID: **MB-251150** Client ID: Units: **ug/Kg** Prep Date: **11/09/2017** Run No: **356575**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251150** Analysis Date: **11/10/2017** Seq No: **7855842**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-251150** Client ID: Units: **ug/Kg** Prep Date: **11/09/2017** Run No: **356575**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251150** Analysis Date: **11/10/2017** Seq No: **7855843**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5586	5500	5000		112	80	120				
Barium	4754	500	5000		95.1	80	120				

Sample ID: **1711349-001BMS** Client ID: Units: **mg/Kg-dry** Prep Date: **11/09/2017** Run No: **356575**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251150** Analysis Date: **11/10/2017** Seq No: **7855845**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	6.582	6.34	4.531		145	75	125				S
Barium	90.93	9.06	4.531		2010	75	125				S

Sample ID: **1711349-001BMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/09/2017** Run No: **356575**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251150** Analysis Date: **11/10/2017** Seq No: **7855846**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	6.405	6.35	4.533		141	75	125	6.582	2.73	20	S
Barium	82.24	9.07	4.533		1810	75	125	90.93	10.0	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1711867

ANALYTICAL QC SUMMARY REPORT

BatchID: 251293

Sample ID: **MB-251293** Client ID: Units: **ug/Kg** Prep Date: **11/09/2017** Run No: **356576**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251293** Analysis Date: **11/10/2017** Seq No: **7855877**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-251293** Client ID: Units: **ug/Kg** Prep Date: **11/09/2017** Run No: **356576**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251293** Analysis Date: **11/10/2017** Seq No: **7855878**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5559	5500	5000		111	80	120				
Barium	4654	500	5000		93.1	80	120				

Sample ID: **1711867-022AMS** Client ID: **LFCS-89** Units: **mg/Kg-dry** Prep Date: **11/09/2017** Run No: **356576**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251293** Analysis Date: **11/10/2017** Seq No: **7855880**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.584	5.54	4.615	0.8039	104	75	125				
Barium	16.07	9.23	4.615	10.45	122	75	125				

Sample ID: **1711867-022AMSD** Client ID: **LFCS-89** Units: **mg/Kg-dry** Prep Date: **11/09/2017** Run No: **356576**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251293** Analysis Date: **11/10/2017** Seq No: **7855881**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.576	5.54	4.613	0.8039	103	75	125	5.584	0.132	20	
Barium	17.24	9.23	4.613	10.45	147	75	125	16.07	7.06	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive Atlanta GA 30340-3906

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1706144

Date: 6/29/17 Page 1 of 1

NY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
: 770-296-9648	FAX: Forrest.howard@Resolutenv.com
ED BY: Forrest Howard	SIGNATURE:

SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	EPA6020 As Ba	EPA6020 As Ba Be	PCBs Totals	TPH-DRO	REMARKS	No # of Containers
EAPCS-16	6/28/17	1105	X		SO	I	X					1
EAPCS-17	6/28/17	1110	X		SO	I	X					1
EAPCS-18	6/28/17	1355	X		SO	I	X					1
CS-15D	6/28/17	1340	X		SO	H		X				1
SWCS-15D-E-1.5	6/28/17	1341	X		SO	H		X				1
SWCS-15D-W-1.5	6/28/17	1342	X		SO	H		X				1
PCS-01	6/28/17	1355 (FH) 555	X		SO					X		

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

QUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	6/28/17 1800	1: To Fedex	
		2:	6/29/17 10:25AM
		3:	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation

PROJECT #:

SITE ADDRESS: Plant Kraft, Port Wentworth GA

SEND REPORT TO: in comments

INVOICE TO: GPC Environmentals Affairs (IF DIFFERENT FROM ABOVE)

Sent w/ CoES Fedex account

QUOTE #: PO#:

RECEIPT

Total # of Containers: 6

Turnaround Time Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: ☐ I ☐ II ☐ III ☐ IV

L INSTRUCTIONS/COMMENTS: Report to:
Forrest Howard
Stephen Wilson
trent Gogelin
Lew millet
Nick Heuman

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

☐ CLIENT ☑ FedEx ☐ UPS ☐ MAIL ☐ COURIER

☐ GREYHOUND ☐ OTHER

ES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED WITH STANDARD TAT.

ES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

X CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) WW=Wastewater DW=Drinking Water O = Other (specify)

VATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 3-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	CS-15D
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/28/2017 1:40:00 PM
Lab ID:	1706R44-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3550C)**				
Aroclor 1016	BRL	38		ug/Kg-dry	244834	1	06/29/2017 16:58	SH
Aroclor 1221	BRL	38		ug/Kg-dry	244834	1	06/29/2017 16:58	SH
Aroclor 1232	BRL	38		ug/Kg-dry	244834	1	06/29/2017 16:58	SH
Aroclor 1242	BRL	38		ug/Kg-dry	244834	1	06/29/2017 16:58	SH
Aroclor 1248	BRL	38		ug/Kg-dry	244834	1	06/29/2017 16:58	SH
Aroclor 1254	BRL	38		ug/Kg-dry	244834	1	06/29/2017 16:58	SH
Aroclor 1260	BRL	38		ug/Kg-dry	244834	1	06/29/2017 16:58	SH
Surr: Decachlorobiphenyl	82.1	43.2-138		%REC	244834	1	06/29/2017 16:58	SH
Surr: Tetrachloro-m-xylene	74.3	46-128		%REC	244834	1	06/29/2017 16:58	SH
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.46		mg/Kg-dry	244835	1	06/29/2017 18:26	JR
Barium	39.0	0.43		mg/Kg-dry	244835	1	06/29/2017 18:26	JR
PERCENT MOISTURE D2216								
Percent Moisture	11.2	0		wt%	R346679	1	06/30/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708897

Date: 8/9/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185
PHONE: 770-296-9648	EMAIL: Forrest.howard@Resktechnician
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 As Ba	ANALYSIS REQUESTED: TPH - DRO	PRESERVATION (see codes): I	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	DCS-01-N	8/8/17	1525	X		SO	X	X				1
2	DCS-01-E	8/8/17	1530	X		SO	X	X				1
3	DCS-01-S	8/8/17	1535	X		SO	X	X				1
4	DCS-01-W	8/8/17	1540	X		SO	X	X				1
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/8/17 1730	1. To Fedex	
2.		2.	8/9/17 1130
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Trent Godwin
Forrest Howard
Greg Millat
Nick Heuman

SHIPMENT METHOD
OUT: / / VIA:
IN: / VIA:
client FedEx UPS US mail courier Greyhound
other:

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Porthartharth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 4

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-N
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:25:00 PM
Lab ID:	1708897-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Benzo(b)fluoranthene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Benzo(a)pyrene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Indeno(1,2,3-cd)pyrene	BRL	370		ug/Kg-dry	246700	1	08/09/2017 18:45	RF
Surr: 2-Fluorobiphenyl	79.9	53.3-120		%REC	246700	1	08/09/2017 18:45	RF
Surr: 4-Terphenyl-d14	92.7	61.2-120		%REC	246700	1	08/09/2017 18:45	RF
Surr: Nitrobenzene-d5	77.7	52.7-120		%REC	246700	1	08/09/2017 18:45	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.06		mg/Kg-dry	246708	1	08/09/2017 22:22	JR
Barium	30.1	0.54		mg/Kg-dry	246708	1	08/09/2017 22:22	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.5		mg/Kg-dry	246699	1	08/09/2017 17:54	RF
Surr: Dioctylphthalate	71.1	54.5-121		%REC	246699	1	08/09/2017 17:54	RF
PERCENT MOISTURE D2216								
Percent Moisture	10.6	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-E
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:30:00 PM
Lab ID:	1708897-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Benzo(a)pyrene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	246700	1	08/09/2017 19:08	RF
Surr: 2-Fluorobiphenyl	73.7	53.3-120		%REC	246700	1	08/09/2017 19:08	RF
Surr: 4-Terphenyl-d14	86.5	61.2-120		%REC	246700	1	08/09/2017 19:08	RF
Surr: Nitrobenzene-d5	74.2	52.7-120		%REC	246700	1	08/09/2017 19:08	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.54		mg/Kg-dry	246708	1	08/09/2017 22:53	JR
Barium	38.0	0.50		mg/Kg-dry	246708	1	08/09/2017 22:53	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.9		mg/Kg-dry	246699	1	08/09/2017 18:24	RF
Surr: Dioctylphthalate	85.9	54.5-121		%REC	246699	1	08/09/2017 18:24	RF
PERCENT MOISTURE D2216								
Percent Moisture	15.1	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-S
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:35:00 PM
Lab ID:	1708897-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Benzo(b)fluoranthene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Benzo(a)pyrene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Indeno(1,2,3-cd)pyrene	BRL	410		ug/Kg-dry	246700	1	08/10/2017 09:27	RF
Surr: 2-Fluorobiphenyl	78.2	53.3-120		%REC	246700	1	08/10/2017 09:27	RF
Surr: 4-Terphenyl-d14	88.5	61.2-120		%REC	246700	1	08/10/2017 09:27	RF
Surr: Nitrobenzene-d5	71.8	52.7-120		%REC	246700	1	08/10/2017 09:27	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.76		mg/Kg-dry	246708	1	08/09/2017 22:59	JR
Barium	37.0	0.52		mg/Kg-dry	246708	1	08/09/2017 22:59	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.3		mg/Kg-dry	246699	1	08/09/2017 18:53	RF
Surr: Dioctylphthalate	72.9	54.5-121		%REC	246699	1	08/09/2017 18:53	RF
PERCENT MOISTURE D2216								
Percent Moisture	19.3	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	DCS-01-W
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 3:40:00 PM
Lab ID:	1708897-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Benz(a)anthracene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Benzo(b)fluoranthene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Benzo(a)pyrene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Indeno(1,2,3-cd)pyrene	BRL	420		ug/Kg-dry	246700	1	08/09/2017 19:54	RF
Surr: 2-Fluorobiphenyl	79.4	53.3-120		%REC	246700	1	08/09/2017 19:54	RF
Surr: 4-Terphenyl-d14	86.9	61.2-120		%REC	246700	1	08/09/2017 19:54	RF
Surr: Nitrobenzene-d5	75.8	52.7-120		%REC	246700	1	08/09/2017 19:54	RF
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.63		mg/Kg-dry	246708	1	08/09/2017 23:05	JR
Barium	126	0.58		mg/Kg-dry	246708	1	08/09/2017 23:05	JR
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.5		mg/Kg-dry	246699	1	08/09/2017 19:23	RF
Surr: Dioctylphthalate	84.3	54.5-121		%REC	246699	1	08/09/2017 19:23	RF
PERCENT MOISTURE D2216								
Percent Moisture	20.9	0		wt%	R349416	1	08/09/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive Atlanta GA 30340-3906

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1706144

Date: 6/29/17 Page 1 of 1

NY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
: 770-296-9648	FAX: Forrest.howard@Resolutenv.com
ED BY: Forrest Howard	SIGNATURE:

SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	EPA6020 As Ba	EPA6020 As Ba Be	PCBs Totals	TPH-DRO	REMARKS	No # of Containers
EAPCS-16	6/28/17	1105	X		SO	I	X					1
EAPCS-17	6/28/17	1110	X		SO	I	X					1
EAPCS-18	6/28/17	1355	X		SO	I	X					1
CS-15D	6/28/17	1340	X		SO	H		X				1
SWCS-15D-E-1.5	6/28/17	1341	X		SO	H		X				1
SWCS-15D-W-1.5	6/28/17	1342	X		SO	H		X				1
PCS-01	6/28/17	1355 (FH) 555	X		SO					X		

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

QUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	6/28/17 1800	1: To Fedex	
		2:	6/29/17 10:25AM
		3:	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation

PROJECT #:

SITE ADDRESS: Plant Kraft, Port Wentworth GA

SEND REPORT TO: in comments

INVOICE TO: GPC Environmentals Affairs (IF DIFFERENT FROM ABOVE)

Sent w/ CoES Fedex account

QUOTE #: PO#:

RECEIPT

Total # of Containers: 6

Turnaround Time Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: ☐ I ☐ II ☐ III ☐ IV

L INSTRUCTIONS/COMMENTS: Report to:
Forrest Howard
Stephen Wilson
trent Gogelin
Lew millet
Nick Heuman

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

☐ CLIENT ☑ FedEx ☐ UPS ☐ MAIL ☐ COURIER

☐ GREYHOUND ☐ OTHER

ES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED WITH STANDARD TAT.

ES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

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VATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 3-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	SWCS-15D-E-1.5
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/28/2017 1:41:00 PM
Lab ID:	1706R44-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3550C)**				
Aroclor 1016	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:28	SH
Aroclor 1221	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:28	SH
Aroclor 1232	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:28	SH
Aroclor 1242	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:28	SH
Aroclor 1248	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:28	SH
Aroclor 1254	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:28	SH
Aroclor 1260	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:28	SH
Surr: Decachlorobiphenyl	88.5	43.2-138		%REC	244834	1	06/29/2017 17:28	SH
Surr: Tetrachloro-m-xylene	99.3	46-128		%REC	244834	1	06/29/2017 17:28	SH
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.47		mg/Kg-dry	244835	1	06/29/2017 18:32	JR
Barium	42.0	0.50		mg/Kg-dry	244835	1	06/29/2017 18:32	JR
PERCENT MOISTURE D2216								
Percent Moisture	23.6	0		wt%	R346679	1	06/30/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive Atlanta GA 30340-3906

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1706144

Date: 6/29/17 Page 1 of 1

NY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
: 770-296-9648	FAX: Forrest.howard@Resolutenv.com
ED BY: Forrest Howard	SIGNATURE:

SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	EPA6020 As Ba	EPA6020 As Ba Be	PCBs Totals	TPH-DRO	REMARKS	No # of Containers
EAPCS-16	6/28/17	1105	X		SO	I	X					1
EAPCS-17	6/28/17	1110	X		SO	I	X					1
EAPCS-18	6/28/17	1355	X		SO	I	X					1
CS-15D	6/28/17	1340	X		SO	H		X				1
SWCS-15D-E-1.5	6/28/17	1341	X		SO	H		X				1
SWCS-15D-W-1.5	6/28/17	1342	X		SO	H		X				1
PCS-01	6/28/17	1355 (FH) 555	X		SO					X		

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

QUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	6/28/17 1800	1: To Fedex	
		2:	6/29/17 10:25AM
		3:	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation

PROJECT #:

SITE ADDRESS: Plant Kraft, Port Wentworth GA

SEND REPORT TO: in comments

INVOICE TO: GPC Environmentals Affairs (IF DIFFERENT FROM ABOVE)

Sent w/ CoES Fedex account

QUOTE #: PO#:

RECEIPT

Total # of Containers: 6

Turnaround Time Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: ☐ I ☐ II ☐ III ☐ IV

L INSTRUCTIONS/COMMENTS: Report to:
Forrest Howard
Stephen Wilson
trent Gogelin
Lew millet
Nick Heuman

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

☐ CLIENT ☑ FedEx ☐ UPS ☐ MAIL ☐ COURIER

☐ GREYHOUND ☐ OTHER

ES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED WITH STANDARD TAT.

ES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

X CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) WW=Wastewater DW=Drinking Water O = Other (specify)

VATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 3-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	SWCS-15D-W-1.5
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/28/2017 1:42:00 PM
Lab ID:	1706R44-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3550C)**				
Aroclor 1016	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:58	SH
Aroclor 1221	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:58	SH
Aroclor 1232	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:58	SH
Aroclor 1242	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:58	SH
Aroclor 1248	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:58	SH
Aroclor 1254	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:58	SH
Aroclor 1260	BRL	44		ug/Kg-dry	244834	1	06/29/2017 17:58	SH
Surr: Decachlorobiphenyl	91.6	43.2-138		%REC	244834	1	06/29/2017 17:58	SH
Surr: Tetrachloro-m-xylene	91.4	46-128		%REC	244834	1	06/29/2017 17:58	SH
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.44		mg/Kg-dry	244835	1	06/29/2017 18:38	JR
Barium	185	0.50		mg/Kg-dry	244835	1	06/29/2017 18:38	JR
PERCENT MOISTURE D2216								
Percent Moisture	23.6	0		wt%	R346679	1	06/30/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 11, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708A51

Analytical Environmental Services, Inc. received 10 samples on 8/10/2017 10:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708A51

Date: 8/9/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
PHONE: 770 296 9648	EMAIL: forrest.howard@Resolutecs.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: RCRA 6020 As Ba	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	SRCS-01	8/9/17	0915	X		SO	X	X		1
2	SRCS-02	8/9/17	0918	X		SO	X	X		1
3	LFCS-02	8/9/17	1435	X		SO	X	X		1
4	LFCS-03	8/9/17	1437	X		SO	X	X		1
5	LFCS-04	8/9/17	1440	X		SO	X	X		1
6	LFCS-05	8/9/17	1442	X		SO	X	X		1
7	LFCS-07	8/9/17	1505	X		SO	X	X		1
8	LFCS-08	8/9/17	1508	X		SO	X	X		1
9	LFCS-09	8/9/17	1510	X		SO	X	X		1
10	LFCS-06	8/9/17	1455	X		SO	X	X		1
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/9/17 1700	1. To Fedex	
2.		2.	8/10/17 10:30
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Forrest Howard
Stephen Wilson
Trent Godwin
Liz Heaven
Lew Millet

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Cross gate Rd Port Wentworth GA
SEND REPORT TO: In Comments
INVOICE TO:
(IF DIFFERENT FROM ABOVE)
GPC Environmental Affairs
AES Fedex account used
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 10

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1708A51

Case Narrative

Per Forrest Howard via phone 8/10/2017 11:35am, same day turnaround was required for samples "SRCS-01" and "SRCS-02."

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-01
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 9:15:00 AM
Lab ID:	1708A51-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	18.8	5.96		mg/Kg-dry	246708	1	08/10/2017 15:23	JR
Barium	20.8	0.40		mg/Kg-dry	246708	1	08/10/2017 15:23	JR
PERCENT MOISTURE D2216								
Percent Moisture	1.91	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 9:18:00 AM
Lab ID:	1708A51-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	98.9	6.78		mg/Kg-dry	246708	1	08/10/2017 15:29	JR
Barium	15.2	0.45		mg/Kg-dry	246708	1	08/10/2017 15:29	JR
PERCENT MOISTURE D2216								
Percent Moisture	1.70	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:35:00 PM
Lab ID:	1708A51-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.42		mg/Kg-dry	246708	1	08/10/2017 16:44	JR
Barium	22.3	0.50		mg/Kg-dry	246708	1	08/10/2017 16:44	JR
PERCENT MOISTURE D2216								
Percent Moisture	11.3	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-03
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:37:00 PM
Lab ID:	1708A51-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.09		mg/Kg-dry	246708	1	08/10/2017 16:51	JR
Barium	35.1	0.54		mg/Kg-dry	246708	1	08/10/2017 16:51	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.4	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-04
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:40:00 PM
Lab ID:	1708A51-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.67		mg/Kg-dry	246708	1	08/10/2017 16:57	JR
Barium	120	0.44		mg/Kg-dry	246708	1	08/10/2017 16:57	JR
PERCENT MOISTURE D2216								
Percent Moisture	13.6	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-05
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:42:00 PM
Lab ID:	1708A51-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.02		mg/Kg-dry	246708	1	08/10/2017 17:03	JR
Barium	69.6	0.54		mg/Kg-dry	246708	1	08/10/2017 17:03	JR
PERCENT MOISTURE D2216								
Percent Moisture	17.0	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-07
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 3:05:00 PM
Lab ID:	1708A51-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.76		mg/Kg-dry	246708	1	08/10/2017 17:09	JR
Barium	22.2	0.52		mg/Kg-dry	246708	1	08/10/2017 17:09	JR
PERCENT MOISTURE D2216								
Percent Moisture	15.0	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-08
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 3:08:00 PM
Lab ID:	1708A51-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.40		mg/Kg-dry	246708	1	08/10/2017 17:15	JR
Barium	39.7	0.43		mg/Kg-dry	246708	1	08/10/2017 17:15	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.6	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-09
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 3:10:00 PM
Lab ID:	1708A51-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.65		mg/Kg-dry	246708	1	08/10/2017 17:22	JR
Barium	27.6	0.58		mg/Kg-dry	246708	1	08/10/2017 17:22	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.8	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-06
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:55:00 PM
Lab ID:	1708A51-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.41		mg/Kg-dry	246708	1	08/10/2017 17:28	JR
Barium	42.5	0.43		mg/Kg-dry	246708	1	08/10/2017 17:28	JR
PERCENT MOISTURE D2216								
Percent Moisture	24.5	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1708A51**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	○	◉	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.5 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments:

I certify that I have completed sections 1-15 (dated initials). TR 8/10/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: 4OZWMGTLS

I certify that I have completed sections 16-27 (dated initials). BB 8/10/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). BB 8/10/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708A51

ANALYTICAL QC SUMMARY REPORT

BatchID: 246708

Sample ID: **MB-246708** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678588**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246708** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678589**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4688	1500	5000		93.8	80	120				
Barium	5135	500	5000		103	80	120				

Sample ID: **1708897-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678591**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8.06	5.371	1.234	74.6	75	125				S
Barium	39.30	0.54	5.371	30.05	172	75	125				S

Sample ID: **1708897-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678592**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8.05	5.370	1.234	71.1	75	125	5.243	0	20	S
Barium	41.82	0.54	5.370	30.05	219	75	125	39.30	6.23	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 15, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708D24

Analytical Environmental Services, Inc. received 17 samples on August 12, 2017 10:15 am for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708D24

Date: 8/11/17 Page 1 of 2

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill blvd SE B1018S Atlanta GA 30308
PHONE: 770 296 9648	EMAIL: forrest.hounsel@RealTeeny.com
SAMPLED BY: Forrest Hounsel	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 As Pb Ca	PRESERVATION (see codes): H+I	REMARKS	Number of Containers
1	LFCS-10	8/11/17	0800	X		SO	X	X		1
2	LFCS-11	8/11/17	0805	X		SO	X	X		
3	LFCS-12	8/11/17	0810	X		SO	X	X		
4	LFCS-13	8/11/17	0836	X		SO	X	X		
5	LFCS-14	8/11/17	0845	X		SO	X	X		
6	LFCS-15	8/11/17	0850	X		SO	X	X		
7	LFCS-16	8/11/17	0858	X		SO	X	X		
8	LFCS-17	8/11/17	0900	X		SO	X	X		
9	LFCS-18	8/11/17	0905	X		SO	X	X		
10	LFCS-19	8/11/17	0915	X		SO	X	X		
11	LFCS-20	8/11/17	0924	X		SO	X	X		
12	LFCS-21	8/11/17	1040	X		SO	X	X		
13	LFCS-22	8/11/17	1047	X		SO	X	X		
14	LFCS-23	8/11/17	1057	X		SO	X	X		

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/11/17 1700	1. Breen	1015 8/12/17
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Forrest Hounsel
Lee Millet
Trent Cochran
Nick Heuman

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Fort Worth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs (IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 14

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708D24

Date: 8/11/17 Page 2 of 2

COMPANY:	ADDRESS:
PHONE:	EMAIL:
SAMPLED BY:	SIGNATURE:

ANALYSIS REQUESTED

As (EPA 6020 Rec)

PRESERVATION (see codes)

I

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	LFCS-24	8/11/17	1105				X		1
2	LFCS-25	8/11/17	1110				X		
3	LFCS-26	8/11/17	1115				X		
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1:	8/11/17 1700	1. Brian Bell	1015 8/12/17
2:		2.	
3:		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT: / / VIA:

IN: / / VIA:

client FedEx UPS US mail courier Greyhound

other: _____

PROJECT INFORMATION

PROJECT NAME:

PROJECT #:

SITE ADDRESS:

SEND REPORT TO:

INVOICE TO:

(IF DIFFERENT FROM ABOVE)

QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 3

Turnaround Time (TAT) Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☒ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____

E-mail? ☐ Fax? ☐

DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-10
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:00:00 AM
Lab ID:	1708D24-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.12		mg/Kg-dry	246880	10	08/14/2017 17:32	JR
Barium	29.3	0.48		mg/Kg-dry	246880	10	08/14/2017 17:32	JR
PERCENT MOISTURE D2216								
Percent Moisture	8.83	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-11
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:05:00 AM
Lab ID:	1708D24-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.64		mg/Kg-dry	246880	10	08/14/2017 18:04	JR
Barium	40.5	5.76		mg/Kg-dry	246880	10	08/14/2017 18:04	JR
PERCENT MOISTURE D2216								
Percent Moisture	25.9	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-12
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:10:00 AM
Lab ID:	1708D24-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	9.02		mg/Kg-dry	246880	10	08/14/2017 18:10	JR
Barium	37.8	6.01		mg/Kg-dry	246880	10	08/14/2017 18:10	JR
PERCENT MOISTURE D2216								
Percent Moisture	37.3	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-13
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:36:00 AM
Lab ID:	1708D24-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	9.71		mg/Kg-dry	246880	10	08/14/2017 18:16	JR
Barium	60.5	6.47		mg/Kg-dry	246880	10	08/14/2017 18:16	JR
PERCENT MOISTURE D2216								
Percent Moisture	22.9	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-14
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:45:00 AM
Lab ID:	1708D24-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.99		mg/Kg-dry	246880	10	08/14/2017 18:48	JR
Barium	45.1	5.99		mg/Kg-dry	246880	10	08/14/2017 18:48	JR
PERCENT MOISTURE D2216								
Percent Moisture	17.4	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-15
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:50:00 AM
Lab ID:	1708D24-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.52		mg/Kg-dry	246880	10	08/14/2017 18:54	JR
Barium	69.0	5.68		mg/Kg-dry	246880	10	08/14/2017 18:54	JR
PERCENT MOISTURE D2216								
Percent Moisture	21.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-16
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:58:00 AM
Lab ID:	1708D24-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.50		mg/Kg-dry	246880	10	08/14/2017 19:01	JR
Barium	39.8	5.00		mg/Kg-dry	246880	10	08/14/2017 19:01	JR
PERCENT MOISTURE D2216								
Percent Moisture	12.8	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-17
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 9:00:00 AM
Lab ID:	1708D24-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.81		mg/Kg-dry	246880	10	08/14/2017 19:07	JR
Barium	41.7	5.88		mg/Kg-dry	246880	10	08/14/2017 19:07	JR
PERCENT MOISTURE D2216								
Percent Moisture	15.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-18
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 9:05:00 AM
Lab ID:	1708D24-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.73		mg/Kg-dry	246880	10	08/14/2017 19:13	JR
Barium	32.0	4.49		mg/Kg-dry	246880	10	08/14/2017 19:13	JR
PERCENT MOISTURE D2216								
Percent Moisture	26.1	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-19
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 9:15:00 AM
Lab ID:	1708D24-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.71		mg/Kg-dry	246880	10	08/14/2017 19:20	JR
Barium	67.7	5.14		mg/Kg-dry	246880	10	08/14/2017 19:20	JR
PERCENT MOISTURE D2216								
Percent Moisture	19.3	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-20
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 9:24:00 AM
Lab ID:	1708D24-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.53		mg/Kg-dry	246880	10	08/14/2017 19:26	JR
Barium	36.9	5.68		mg/Kg-dry	246880	10	08/14/2017 19:26	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.6	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-21
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 10:40:00 AM
Lab ID:	1708D24-012	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.88		mg/Kg-dry	246880	10	08/14/2017 19:32	JR
Barium	61.0	4.59		mg/Kg-dry	246880	10	08/14/2017 19:32	JR
PERCENT MOISTURE D2216								
Percent Moisture	17.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-22
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 10:47:00 AM
Lab ID:	1708D24-013	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.10		mg/Kg-dry	246880	10	08/14/2017 19:38	JR
Barium	36.4	5.40		mg/Kg-dry	246880	10	08/14/2017 19:38	JR
PERCENT MOISTURE D2216								
Percent Moisture	12.9	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-23
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 10:57:00 AM
Lab ID:	1708D24-014	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.05		mg/Kg-dry	246880	10	08/14/2017 19:45	JR
Barium	44.1	5.37		mg/Kg-dry	246880	10	08/14/2017 19:45	JR
PERCENT MOISTURE D2216								
Percent Moisture	12.6	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-24
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 11:05:00 AM
Lab ID:	1708D24-015	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	7.10	6.73		mg/Kg-dry	246880	10	08/14/2017 20:16	JR
Barium	94.0	4.48		mg/Kg-dry	246880	10	08/14/2017 20:16	JR
PERCENT MOISTURE D2216								
Percent Moisture	24.8	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-25
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 11:10:00 AM
Lab ID:	1708D24-016	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.89		mg/Kg-dry	246880	10	08/14/2017 20:23	JR
Barium	52.7	5.26		mg/Kg-dry	246880	10	08/14/2017 20:23	JR
PERCENT MOISTURE D2216								
Percent Moisture	17.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-26
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 11:15:00 AM
Lab ID:	1708D24-017	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.72		mg/Kg-dry	246880	10	08/14/2017 20:29	JR
Barium	125	5.82		mg/Kg-dry	246880	10	08/14/2017 20:29	JR
PERCENT MOISTURE D2216								
Percent Moisture	21.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GEORGIA POWER** AES Work Order Number: **1708D24**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	○	◉	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 0.9 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). BB 8/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). BB 8/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). BB 8/12/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708D24

ANALYTICAL QC SUMMARY REPORT

BatchID: 246880

Sample ID: **MB-246880** Client ID: Units: **ug/Kg** Prep Date: **08/14/2017** Run No: **349770**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246880** Analysis Date: **08/14/2017** Seq No: **7686094**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246880** Client ID: Units: **ug/Kg** Prep Date: **08/14/2017** Run No: **349770**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246880** Analysis Date: **08/14/2017** Seq No: **7686095**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4878	1500	5000		97.6	80	120				
Barium	5098	500	5000		102	80	120				

Sample ID: **1708D24-001AMS** Client ID: **LFCS-10** Units: **mg/Kg-dry** Prep Date: **08/14/2017** Run No: **349770**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246880** Analysis Date: **08/14/2017** Seq No: **7686097**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.003	7.14	4.758	2.763	110	75	125				
Barium	27.76	0.48	4.758	29.26	-31.6	75	125				S

Sample ID: **1708D24-001AMSD** Client ID: **LFCS-10** Units: **mg/Kg-dry** Prep Date: **08/14/2017** Run No: **349770**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246880** Analysis Date: **08/14/2017** Seq No: **7686098**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7.425	7.13	4.756	2.763	98.0	75	125	8.003	7.49	20	
Barium	29.73	0.48	4.756	29.26	9.71	75	125	27.76	6.84	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 15, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708D24

Analytical Environmental Services, Inc. received 17 samples on August 12, 2017 10:15 am for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708D24

Date: 8/11/17 Page 1 of 2

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill blvd SE B1018S Atlanta GA 30308
PHONE: 770 296 9648	EMAIL: forrest.hounsel@RealTeeny.com
SAMPLED BY: Forrest Hounsel	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 As Pb Ca	PRESERVATION (see codes): H+I	REMARKS	Number of Containers
1	LFCS-10	8/11/17	0800	X		SO	X	X		1
2	LFCS-11	8/11/17	0805	X		SO	X	X		
3	LFCS-12	8/11/17	0810	X		SO	X	X		
4	LFCS-13	8/11/17	0836	X		SO	X	X		
5	LFCS-14	8/11/17	0845	X		SO	X	X		
6	LFCS-15	8/11/17	0850	X		SO	X	X		
7	LFCS-16	8/11/17	0858	X		SO	X	X		
8	LFCS-17	8/11/17	0900	X		SO	X	X		
9	LFCS-18	8/11/17	0905	X		SO	X	X		
10	LFCS-19	8/11/17	0915	X		SO	X	X		
11	LFCS-20	8/11/17	0924	X		SO	X	X		
12	LFCS-21	8/11/17	1040	X		SO	X	X		
13	LFCS-22	8/11/17	1047	X		SO	X	X		
14	LFCS-23	8/11/17	1057	X		SO	X	X		

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/11/17 1700	1. Breen	1015 8/12/17
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Forrest Hounsel
Lee Millet
Trent Cochran
Nick Heuman

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Fort Worth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs (IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 14

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708D24

Date: 8/11/17 Page 2 of 2

COMPANY:	ADDRESS:
PHONE:	EMAIL:
SAMPLED BY:	SIGNATURE:

ANALYSIS REQUESTED

As (EPA 6020 Rec)

PRESERVATION (see codes)

I

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	LFCS-24	8/11/17	1105				X		1
2	LFCS-25	8/11/17	1110				X		
3	LFCS-26	8/11/17	1115				X		
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1:	8/11/17 1700	1. Brian Bell	1015 8/12/17
2:		2.	
3:		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT: / / VIA:

IN: / / VIA:

client FedEx UPS US mail courier Greyhound

other: _____

PROJECT INFORMATION

PROJECT NAME:

PROJECT #:

SITE ADDRESS:

SEND REPORT TO:

INVOICE TO:

(IF DIFFERENT FROM ABOVE)

QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 3

Turnaround Time (TAT) Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☒ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____

E-mail? ☐ Fax? ☐

DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-10
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:00:00 AM
Lab ID:	1708D24-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.12		mg/Kg-dry	246880	10	08/14/2017 17:32	JR
Barium	29.3	0.48		mg/Kg-dry	246880	10	08/14/2017 17:32	JR
PERCENT MOISTURE D2216								
Percent Moisture	8.83	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-11
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:05:00 AM
Lab ID:	1708D24-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.64		mg/Kg-dry	246880	10	08/14/2017 18:04	JR
Barium	40.5	5.76		mg/Kg-dry	246880	10	08/14/2017 18:04	JR
PERCENT MOISTURE D2216								
Percent Moisture	25.9	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-12
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:10:00 AM
Lab ID:	1708D24-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	9.02		mg/Kg-dry	246880	10	08/14/2017 18:10	JR
Barium	37.8	6.01		mg/Kg-dry	246880	10	08/14/2017 18:10	JR
PERCENT MOISTURE D2216								
Percent Moisture	37.3	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-13
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:36:00 AM
Lab ID:	1708D24-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	9.71		mg/Kg-dry	246880	10	08/14/2017 18:16	JR
Barium	60.5	6.47		mg/Kg-dry	246880	10	08/14/2017 18:16	JR
PERCENT MOISTURE D2216								
Percent Moisture	22.9	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-14
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:45:00 AM
Lab ID:	1708D24-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.99		mg/Kg-dry	246880	10	08/14/2017 18:48	JR
Barium	45.1	5.99		mg/Kg-dry	246880	10	08/14/2017 18:48	JR
PERCENT MOISTURE D2216								
Percent Moisture	17.4	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-15
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:50:00 AM
Lab ID:	1708D24-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.52		mg/Kg-dry	246880	10	08/14/2017 18:54	JR
Barium	69.0	5.68		mg/Kg-dry	246880	10	08/14/2017 18:54	JR
PERCENT MOISTURE D2216								
Percent Moisture	21.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-16
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 8:58:00 AM
Lab ID:	1708D24-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.50		mg/Kg-dry	246880	10	08/14/2017 19:01	JR
Barium	39.8	5.00		mg/Kg-dry	246880	10	08/14/2017 19:01	JR
PERCENT MOISTURE D2216								
Percent Moisture	12.8	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-17
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 9:00:00 AM
Lab ID:	1708D24-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.81		mg/Kg-dry	246880	10	08/14/2017 19:07	JR
Barium	41.7	5.88		mg/Kg-dry	246880	10	08/14/2017 19:07	JR
PERCENT MOISTURE D2216								
Percent Moisture	15.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-18
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 9:05:00 AM
Lab ID:	1708D24-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.73		mg/Kg-dry	246880	10	08/14/2017 19:13	JR
Barium	32.0	4.49		mg/Kg-dry	246880	10	08/14/2017 19:13	JR
PERCENT MOISTURE D2216								
Percent Moisture	26.1	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-19
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 9:15:00 AM
Lab ID:	1708D24-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.71		mg/Kg-dry	246880	10	08/14/2017 19:20	JR
Barium	67.7	5.14		mg/Kg-dry	246880	10	08/14/2017 19:20	JR
PERCENT MOISTURE D2216								
Percent Moisture	19.3	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-20
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 9:24:00 AM
Lab ID:	1708D24-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.53		mg/Kg-dry	246880	10	08/14/2017 19:26	JR
Barium	36.9	5.68		mg/Kg-dry	246880	10	08/14/2017 19:26	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.6	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-21
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 10:40:00 AM
Lab ID:	1708D24-012	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.88		mg/Kg-dry	246880	10	08/14/2017 19:32	JR
Barium	61.0	4.59		mg/Kg-dry	246880	10	08/14/2017 19:32	JR
PERCENT MOISTURE D2216								
Percent Moisture	17.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-22
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 10:47:00 AM
Lab ID:	1708D24-013	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.10		mg/Kg-dry	246880	10	08/14/2017 19:38	JR
Barium	36.4	5.40		mg/Kg-dry	246880	10	08/14/2017 19:38	JR
PERCENT MOISTURE D2216								
Percent Moisture	12.9	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-23
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 10:57:00 AM
Lab ID:	1708D24-014	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.05		mg/Kg-dry	246880	10	08/14/2017 19:45	JR
Barium	44.1	5.37		mg/Kg-dry	246880	10	08/14/2017 19:45	JR
PERCENT MOISTURE D2216								
Percent Moisture	12.6	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-24
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 11:05:00 AM
Lab ID:	1708D24-015	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	7.10	6.73		mg/Kg-dry	246880	10	08/14/2017 20:16	JR
Barium	94.0	4.48		mg/Kg-dry	246880	10	08/14/2017 20:16	JR
PERCENT MOISTURE D2216								
Percent Moisture	24.8	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-25
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 11:10:00 AM
Lab ID:	1708D24-016	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.89		mg/Kg-dry	246880	10	08/14/2017 20:23	JR
Barium	52.7	5.26		mg/Kg-dry	246880	10	08/14/2017 20:23	JR
PERCENT MOISTURE D2216								
Percent Moisture	17.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-26
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/11/2017 11:15:00 AM
Lab ID:	1708D24-017	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.72		mg/Kg-dry	246880	10	08/14/2017 20:29	JR
Barium	125	5.82		mg/Kg-dry	246880	10	08/14/2017 20:29	JR
PERCENT MOISTURE D2216								
Percent Moisture	21.0	0		wt%	R349824	1	08/15/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GEORGIA POWER** AES Work Order Number: **1708D24**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	○	◉	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 0.9 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). BB 8/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). BB 8/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). BB 8/12/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708D24

ANALYTICAL QC SUMMARY REPORT

BatchID: 246880

Sample ID: **MB-246880** Client ID: Units: **ug/Kg** Prep Date: **08/14/2017** Run No: **349770**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246880** Analysis Date: **08/14/2017** Seq No: **7686094**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246880** Client ID: Units: **ug/Kg** Prep Date: **08/14/2017** Run No: **349770**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246880** Analysis Date: **08/14/2017** Seq No: **7686095**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4878	1500	5000		97.6	80	120				
Barium	5098	500	5000		102	80	120				

Sample ID: **1708D24-001AMS** Client ID: **LFCS-10** Units: **mg/Kg-dry** Prep Date: **08/14/2017** Run No: **349770**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246880** Analysis Date: **08/14/2017** Seq No: **7686097**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.003	7.14	4.758	2.763	110	75	125				
Barium	27.76	0.48	4.758	29.26	-31.6	75	125				S

Sample ID: **1708D24-001AMSD** Client ID: **LFCS-10** Units: **mg/Kg-dry** Prep Date: **08/14/2017** Run No: **349770**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246880** Analysis Date: **08/14/2017** Seq No: **7686098**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7.425	7.13	4.756	2.763	98.0	75	125	8.003	7.49	20	
Barium	29.73	0.48	4.756	29.26	9.71	75	125	27.76	6.84	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 31, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708R46

Analytical Environmental Services, Inc. received 4 samples on 8/30/2017 10:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions for Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

AES

CHAIN OF CUSTODY

Work Order: 1708R46

Date: _____ Page _____ of _____

COMPANY:	ADDRESS: [illegible] GA 30308
PHONE:	EMAIL: [illegible]
SAMPLED BY:	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1				X		SO	X		
2		8/28/17	1?2	X		SO	X		
3		8/29/17	.:50	X		SO	X		
4		8/29/17	1322	X		SO	X		
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED: EPA 6020 As Ba

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.		1. FedEx	
2.		2. Mayfew	8/30/17 10:30
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excu
PROJECT #:
SITE ADDRESS: 155 crossgate D
SEND REPORT TO: [illegible]
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Envirol Sent to [illegible]
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc

Date: 1-Sep-17

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1708R46

Case Narrative

Sample Receiving Nonconformance:

Due to water in the cooler, Sample ID's were barely visible on the Chain of Custody for all samples, and collection date and time was not present for sample -001. Samples ID's and collection date/time were verified by Forrest Howard via email on 8/30/2017.

Analytical Environmental Services, Inc **Date:** 31-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-27
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/28/2017 1:20:00 PM
Lab ID:	1708R46-001	**Matrix:**	Solid

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.22		mg/Kg-dry	247500	10	08/30/2017 21:04	JR
Barium	10.5	0.47		mg/Kg-dry	247500	10	08/30/2017 21:04	JR
PERCENT MOISTURE D2216								
Percent Moisture	8.47	0		wt%	R351080	1	08/31/2017 16:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-28
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/28/2017 1:25:00 PM
Lab ID:	1708R46-002	**Matrix:**	Solid

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.89		mg/Kg-dry	247500	10	08/30/2017 21:10	JR
Barium	36.3	0.45		mg/Kg-dry	247500	10	08/30/2017 21:10	JR
PERCENT MOISTURE D2216								
Percent Moisture	9.40	0		wt%	R351080	1	08/31/2017 16:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-19
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/29/2017 1:20:00 PM
Lab ID:	1708R46-003	**Matrix:**	Solid

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.31		mg/Kg-dry	247500	10	08/30/2017 21:16	JR
Barium	5.13	0.49		mg/Kg-dry	247500	10	08/30/2017 21:16	JR
PERCENT MOISTURE D2216								
Percent Moisture	2.88	0		wt%	R351080	1	08/31/2017 16:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-20
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/29/2017 1:22:00 PM
Lab ID:	1708R46-004	**Matrix:**	Solid

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.50		mg/Kg-dry	247500	10	08/30/2017 21:23	JR
Barium	13.9	0.49		mg/Kg-dry	247500	10	08/30/2017 21:23	JR
PERCENT MOISTURE D2216								
Percent Moisture	6.07	0		wt%	R351080	1	08/31/2017 16:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1708R46**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	◉	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.4 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 8/30/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	○	◉	○	incomplete info ☐ illegible ■ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). AJ 8/30/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). AJ 8/30/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708R46

ANALYTICAL QC SUMMARY REPORT

BatchID: 247500

Sample ID: **MB-247500** Client ID: Units: **ug/Kg** Prep Date: **08/29/2017** Run No: **350962**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247500** Analysis Date: **08/30/2017** Seq No: **7714353**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-247500** Client ID: Units: **ug/Kg** Prep Date: **08/29/2017** Run No: **350962**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247500** Analysis Date: **08/30/2017** Seq No: **7714354**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4556	750	5000		91.1	80	120				
Barium	4719	500	5000		94.4	80	120				

Sample ID: **1708M24-008AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **08/29/2017** Run No: **350962**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247500** Analysis Date: **08/30/2017** Seq No: **7714358**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	12920	11700	9720	3071	101	75	125				
Barium	27700	19400	9720	16710	113	75	125				

Sample ID: **1708M24-008AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **08/29/2017** Run No: **350962**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247500** Analysis Date: **08/30/2017** Seq No: **7714363**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	12580	11500	9583	3071	99.2	75	125	12920	2.72	20	
Barium	29200	19200	9583	16710	130	75	125	27700	5.29	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

May 21, 2018

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1805J70

Analytical Environmental Services, Inc. received 22 samples on 5/18/2018 10:00:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18. State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Paris Masoudi

Paris Masoudi

Project Manager

3080 Presidential Drive • Atlanta, Georgia 30340 • Tel: 770.457.8177 • Fax: 770.457.8188 • Toll Free: 800.972.4889
www.aesatlanta.com

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

1805J70

Work Order: 1805J70

Date: 5/17/18 Page 1 of 2

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd NE Bin 12S Atlanta, GA 30308
PHONE: 678-548-9415	EMAIL: Kevin.Stephenson@Donaldson.com
SAMPLED BY: Kevin Stephenson	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	PLCS-1	5/14/18	0952						1
2	PLCS-2	5/14/18	0956						1
3	PLCS-3SW	5/14/18	0958						1
4	PLCS-4	5/15/18	0916						1
5	PLCS-5SW	5/15/18	0918						1
6	PLCS-6	5/15/18	1410						1
7	PLCS-7SW	5/15/18	1414						1
8	PLCS-8	5/15/18	1416						1
9	PLCS-9SW	5/15/18	1418						1
10	PLCS-10	5/16/18	1440						1
11	PLCS-11SW	5/15/18	1442						1
12	PLCS-12SW	5/16/18	0950						1
13	PLCS-13SW	5/16/18	0954						1
14	PLCS-14SW	5/16/18	1120						1

ANALYSIS REQUESTED: Filtered (Y/N); 8260B; 6010B/7470A

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Kevin Stephenson	5/17/18 @ 1150	1.	5-18-18 10:00
2.		2.	
3.		3.	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Road, Port Wentworth
SEND REPORT TO: See comments!
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental
QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 14

Turnaround Time (TAT) Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☒ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

SPECIAL INSTRUCTIONS/COMMENTS: Report to: Kevin Stephenson, Lisa Mullet, Stephen Wilson, Trent Cooley

SHIPMENT METHOD

OUT: 5/17/18 VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

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Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

1805J70

Work Order: 1805J70 PM

Date: 5/17/18 Page 2 of 2 5/18

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd NE Bin 885 Atlanta, GA 30308
PHONE: 678-548-9415	EMAIL: kwstephens3@gwallace.com
SAMPLED BY: Kevin Stephens	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	PLCS-15	5/16/18	1230			SO			1
2	PLCS-16sw	5/16/18	1232			SO			1
3	PLCS-17	5/16/18	1326			SO			1
4	PLCS-18sw	5/16/18	1328						1
5	PLCS-19	5/16/18	1342						1
6	PLCS-20sw	5/16/18	1344						1
7	PLCS-21	5/16/18	1412						1
8	PLCS-22sw	5/16/18	1414						1
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Kevin Stephens	5/17/18	1.	5-18-18 10:00
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: 5/ [illegible]/18 VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Road, Port Wentworth
SEND REPORT TO: See Page #1
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 10

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☒ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

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Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-1
Project Name	Plant Kraft Excavation	**Collection Date:**	5/14/2018 9:52:00 AM
Lab ID:	1805J70-001	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		8.09	7.35	mg/Kg-dry	260958	50	05/18/2018 19:41	DP
Barium	42.2		0.855	0.50	mg/Kg-dry	260958	50	05/18/2018 19:41	DP
PERCENT MOISTURE D2216									
Percent Moisture	17.5		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-2
Project Name	Plant Kraft Excavation	**Collection Date:**	5/14/2018 9:56:00 AM
Lab ID:	1805J70-002	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		9.88	7.14	mg/Kg-dry	260958	50	05/18/2018 19:43	DP
Barium	27.9		1.04	0.47	mg/Kg-dry	260958	50	05/18/2018 19:43	DP
PERCENT MOISTURE D2216									
Percent Moisture	19.2		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-3SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/14/2018 9:58:00 AM
Lab ID:	1805J70-003	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		12.4	7.69	mg/Kg-dry	260958	50	05/18/2018 19:45	DP
Barium	32.9		1.31	0.51	mg/Kg-dry	260958	50	05/18/2018 19:45	DP
PERCENT MOISTURE D2216									
Percent Moisture	24.0		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-4
Project Name	Plant Kraft Excavation	**Collection Date:**	5/15/2018 9:16:00 AM
Lab ID:	1805J70-004	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		8.92	7.37	mg/Kg-dry	260958	50	05/18/2018 19:47	DP
Barium	41.5		0.944	0.52	mg/Kg-dry	260958	50	05/18/2018 19:47	DP
PERCENT MOISTURE D2216									
Percent Moisture	16.1		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-5SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/15/2018 9:18:00 AM
Lab ID:	1805J70-005	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		10.3	7.44	mg/Kg-dry	260958	50	05/18/2018 19:31	DP
Barium	55.8		1.09	0.49	mg/Kg-dry	260958	50	05/18/2018 19:31	DP
PERCENT MOISTURE D2216									
Percent Moisture	17.8		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-6
Project Name	Plant Kraft Excavation	**Collection Date:**	5/15/2018 2:10:00 PM
Lab ID:	1805J70-006	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		12.5	7.72	mg/Kg-dry	260958	50	05/18/2018 19:49	DP
Barium	90.8		1.32	0.52	mg/Kg-dry	260958	50	05/18/2018 19:49	DP
PERCENT MOISTURE D2216									
Percent Moisture	26.4		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-7SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/15/2018 2:14:00 PM
Lab ID:	1805J70-007	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		10.1	7.32	mg/Kg-dry	260958	50	05/18/2018 19:57	DP
Barium	18.7		1.07	0.50	mg/Kg-dry	260958	50	05/18/2018 19:57	DP
PERCENT MOISTURE D2216									
Percent Moisture	11.1		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

* Value exceeds maximum contaminant level	E Estimated value above quantitation range
BRL Not detected at MDL	S Spike Recovery outside limits due to matrix
H Holding times for preparation or analysis exceeded	J Estimated value detected below Reporting Limit
N Analyte not NELAC certified	> Greater than Result value
B Analyte detected in the associated method blank	< Less than Result value
NC Not confirmed	Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-8
Project Name	Plant Kraft Excavation	**Collection Date:**	5/15/2018 2:16:00 PM
Lab ID:	1805J70-008	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		11.7	7.27	mg/Kg-dry	260958	50	05/18/2018 19:59	DP
Barium	29.0		1.24	0.51	mg/Kg-dry	260958	50	05/18/2018 19:59	DP
PERCENT MOISTURE D2216									
Percent Moisture	16.8		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-9SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/15/2018 2:18:00 PM
Lab ID:	1805J70-009	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		12.3	7.11	mg/Kg-dry	260958	50	05/18/2018 20:01	DP
Barium	9.67		1.30	0.51	mg/Kg-dry	260958	50	05/18/2018 20:01	DP
PERCENT MOISTURE D2216									
Percent Moisture	14.7		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-10
Project Name	Plant Kraft Excavation	**Collection Date:**	5/15/2018 2:40:00 PM
Lab ID:	1805J70-010	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		8.77	7.25	mg/Kg-dry	260958	50	05/18/2018 20:03	DP
Barium	44.4		0.928	0.51	mg/Kg-dry	260958	50	05/18/2018 20:03	DP
PERCENT MOISTURE D2216									
Percent Moisture	22.1		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-11SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/15/2018 2:42:00 PM
Lab ID:	1805J70-011	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		11.1	7.37	mg/Kg-dry	260958	50	05/18/2018 20:05	DP
Barium	17.8		1.18	0.51	mg/Kg-dry	260958	50	05/18/2018 20:05	DP
PERCENT MOISTURE D2216									
Percent Moisture	14.4		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-12SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 9:50:00 AM
Lab ID:	1805J70-012	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		11.5	7.38	mg/Kg-dry	260958	50	05/18/2018 20:07	DP
Barium	20.8		1.22	0.50	mg/Kg-dry	260958	50	05/18/2018 20:07	DP
PERCENT MOISTURE D2216									
Percent Moisture	19.8		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-13SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 9:54:00 AM
Lab ID:	1805J70-013	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		9.69	7.41	mg/Kg-dry	260958	50	05/18/2018 20:09	DP
Barium	38.5		1.02	0.50	mg/Kg-dry	260958	50	05/18/2018 20:09	DP
PERCENT MOISTURE D2216									
Percent Moisture	7.93		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

* Value exceeds maximum contaminant level	E Estimated value above quantitation range
BRL Not detected at MDL	S Spike Recovery outside limits due to matrix
H Holding times for preparation or analysis exceeded	J Estimated value detected below Reporting Limit
N Analyte not NELAC certified	> Greater than Result value
B Analyte detected in the associated method blank	< Less than Result value
NC Not confirmed	Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-14SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 11:20:00 AM
Lab ID:	1805J70-014	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		10.5	7.37	mg/Kg-dry	260958	50	05/18/2018 20:11	DP
Barium	20.9		1.11	0.50	mg/Kg-dry	260958	50	05/18/2018 20:11	DP
PERCENT MOISTURE D2216									
Percent Moisture	13.9		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-15
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 12:30:00 PM
Lab ID:	1805J70-015	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		11.8	7.34	mg/Kg-dry	260958	50	05/18/2018 20:13	DP
Barium	16.1		1.25	0.49	mg/Kg-dry	260958	50	05/18/2018 20:13	DP
PERCENT MOISTURE D2216									
Percent Moisture	10.1		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-16SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 12:32:00 PM
Lab ID:	1805J70-016	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		9.27	7.28	mg/Kg-dry	260958	50	05/18/2018 20:15	DP
Barium	12.3		0.981	0.50	mg/Kg-dry	260958	50	05/18/2018 20:15	DP
PERCENT MOISTURE D2216									
Percent Moisture	16.3		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-17
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 1:26:00 PM
Lab ID:	1805J70-017	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		12.2	7.55	mg/Kg-dry	260958	50	05/18/2018 20:23	DP
Barium	7.74		1.29	0.50	mg/Kg-dry	260958	50	05/18/2018 20:23	DP
PERCENT MOISTURE D2216									
Percent Moisture	10.1		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-18SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 1:28:00 PM
Lab ID:	1805J70-018	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B (SW3050B)									
Arsenic	BRL		7.77	7.06	mg/Kg-dry	260958	50	05/18/2018 20:24	DP
Barium	19.3		0.822	0.48	mg/Kg-dry	260958	50	05/18/2018 20:24	DP
PERCENT MOISTURE D2216									
Percent Moisture	14.8		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-19
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 1:42:00 PM
Lab ID:	1805J70-019	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		10.8	7.16	mg/Kg-dry	260958	50	05/18/2018 20:26	DP
Barium	11.4		1.15	0.49	mg/Kg-dry	260958	50	05/18/2018 20:26	DP
PERCENT MOISTURE D2216									
Percent Moisture	15.5		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-20SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 1:44:00 PM
Lab ID:	1805J70-020	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		10.3	7.47	mg/Kg-dry	260958	50	05/18/2018 20:28	DP
Barium	8.18		1.09	0.47	mg/Kg-dry	260958	50	05/18/2018 20:28	DP
PERCENT MOISTURE D2216									
Percent Moisture	10.2		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-21
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 2:12:00 PM
Lab ID:	1805J70-021	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		8.85	7.31	mg/Kg-dry	260959	50	05/18/2018 19:10	DP
Barium	16.1	J	0.936	18.3	mg/Kg-dry	260959	50	05/18/2018 19:10	DP
PERCENT MOISTURE D2216									
Percent Moisture	8.84		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-May-18

Client:	Georgia Power Company	**Client Sample ID:**	PLCS-22SW
Project Name	Plant Kraft Excavation	**Collection Date:**	5/16/2018 2:14:00 PM
Lab ID:	1805J70-022	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**				
Arsenic	BRL		9.28	7.48	mg/Kg-dry	260959	50	05/18/2018 19:20	DP
Barium	9.47	J	0.981	19.2	mg/Kg-dry	260959	50	05/18/2018 19:20	DP
PERCENT MOISTURE D2216									
Percent Moisture	23.3		0	0	wt%	R370716	1	05/18/2018 16:40	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Client: Georgia Power Company
Project Name Plant Kraft Excavation
Workorder: 1805J70

ANALYTICAL QC SUMMARY REPORT

BatchID: 260958

Sample ID: **MB-260958** Client ID: Units: **ug/Kg** Prep Date: **05/18/2018** Run No: **370732**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **260958** Analysis Date: **05/18/2018** Seq No: **8220507**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-260958** Client ID: Units: **ug/Kg** Prep Date: **05/18/2018** Run No: **370732**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **260958** Analysis Date: **05/18/2018** Seq No: **8220508**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4723	4500	5000		94.5	80	120				
Barium	4879	500	5000		97.6	80	120				

Sample ID: **1805J70-005AMS** Client ID: **PLCS-5SW** Units: **mg/Kg-dry** Prep Date: **05/18/2018** Run No: **370732**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **260958** Analysis Date: **05/18/2018** Seq No: **8220512**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.45	4.260		0	75	125				S
Barium	49.85	0.49	4.260	55.85	-141	75	125				S

Sample ID: **1805J70-005AMSD** Client ID: **PLCS-5SW** Units: **mg/Kg-dry** Prep Date: **05/18/2018** Run No: **370732**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **260958** Analysis Date: **05/18/2018** Seq No: **8220513**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.47	4.269		0	75	125	0	0	20	S
Barium	51.47	0.49	4.269	55.85	-103	75	125	49.85	3.21	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name Plant Kraft Excavation
Workorder: 1805J70

ANALYTICAL QC SUMMARY REPORT

BatchID: 260959

Sample ID: **MB-260959**	Client ID:			Units: **ug/Kg**	Prep Date: **05/18/2018**	Run No: **370731**
SampleType: **MBLK**	TestCode: **Metals by ICP/MS SW6020B**			BatchID: **260959**	Analysis Date: **05/18/2018**	Seq No: **8220473**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-260959**	Client ID:			Units: **ug/Kg**	Prep Date: **05/18/2018**	Run No: **370731**
SampleType: **LCS**	TestCode: **Metals by ICP/MS SW6020B**			BatchID: **260959**	Analysis Date: **05/18/2018**	Seq No: **8220474**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4888	4000	5000		97.8	80	120				
Barium	4658	500	5000		93.2	80	120				

Sample ID: **1805J70-021AMS**	Client ID: **PLCS-21**			Units: **mg/Kg-dry**	Prep Date: **05/18/2018**	Run No: **370731**
SampleType: **MS**	TestCode: **Metals by ICP/MS SW6020B**			BatchID: **260959**	Analysis Date: **05/18/2018**	Seq No: **8220476**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7.321	7.31	3.656		200	75	125				S
Barium	21.13	18.3	3.656	16.08	138	75	125				S

Sample ID: **1805J70-021AMSD**	Client ID: **PLCS-21**			Units: **mg/Kg-dry**	Prep Date: **05/18/2018**	Run No: **370731**
SampleType: **MSD**	TestCode: **Metals by ICP/MS SW6020B**			BatchID: **260959**	Analysis Date: **05/18/2018**	Seq No: **8220477**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7.723	7.30	3.652		211	75	125	7.321	5.35	20	S
Barium	22.19	18.3	3.652	16.08	167	75	125	21.13	4.92	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 18, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708H91

Analytical Environmental Services, Inc. received 1 samples on 8/17/2017 10:20:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708191

Date: 8/16/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
PHONE: 770-296-9648	EMAIL: forrest.howard@Resolutionenv.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 As	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	RRCS-11A	8/16/17	1500	X		SO	X	X		1
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/16/17 1700	1. To FedEx	
2.		2.	8/17/17 1020
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: ? sent to:
Stephen Wilson
Nick Heyman
Forrest Howard
Trent Godwin
Lea Millet

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Fortson/Hardwick GA
SEND REPORT TO:
INVOICE TO:
(IF DIFFERENT FROM ABOVE)
GPC Environmental Affairs
AES Fedex account used
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 1

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush **(auth req.)**
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 18-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-11A
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/16/2017 3:00:00 PM
Lab ID:	1708H91-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**			
Arsenic	BRL	5.13		mg/Kg-dry	247106	10	08/18/2017 14:51	JR
PERCENT MOISTURE D2216								
Percent Moisture	20.4	0		wt%	R350150	1	08/18/2017 17:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1708H91**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	◉	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.1 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). AJ 8/17/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). AJ 8/17/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). AJ 8/17/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708H91

ANALYTICAL QC SUMMARY REPORT

BatchID: 247106

Sample ID: **MB-247106** Client ID: Units: **ug/Kg** Prep Date: **08/17/2017** Run No: **350126**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247106** Analysis Date: **08/18/2017** Seq No: **7693552**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									

Sample ID: **LCS-247106** Client ID: Units: **ug/Kg** Prep Date: **08/17/2017** Run No: **350126**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247106** Analysis Date: **08/18/2017** Seq No: **7693553**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4763	1500	5000		95.3	80	120				

Sample ID: **1708G81-001BMS** Client ID: Units: **ug/Kg** Prep Date: **08/17/2017** Run No: **350126**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247106** Analysis Date: **08/18/2017** Seq No: **7693557**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	13300	4420	4760	95.8	75	125				

Sample ID: **1708G81-001BMSD** Client ID: Units: **ug/Kg** Prep Date: **08/17/2017** Run No: **350126**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247106** Analysis Date: **08/18/2017** Seq No: **7693558**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	13300	4421	4760	87.7	75	125	8995	0	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 21, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708J35

Analytical Environmental Services, Inc. received 2 samples on 8/18/2017 10:10:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708J35

Date: 8/17/17 Page 1 of 1

COMPANY: Georgia River Company	ADDRESS: 241 Ralph McGill Blvd SE B10185
PHONE: 770-296-9648	EMAIL: Forrest.Howard@RiverInteriors.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 As Ba	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	RRCS-17	8/17/17	1155	X		SO	X	X		
2	RRCS-18	8/17/17	1158	X		SO	X	X		
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/17/17 1700	1. To Fedex	
2.		2.	8/18/17 1020
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:
Report to:
Forrest Howard
Trent Godwin
Lea Millet
Nick Heuman
Stephen Willson

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 ~~Pla~~ Crossgate Rd, Pemberton
SEND REPORT TO: mcamiranty
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
AES Account used
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 21-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-17
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/17/2017 11:55:00 AM
Lab ID:	1708J35-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.74		mg/Kg-dry	247180	10	08/20/2017 19:42	JR
Barium	11.2	4.49		mg/Kg-dry	247180	10	08/20/2017 19:42	JR
PERCENT MOISTURE D2216								
Percent Moisture	5.66	0		wt%	R350233	1	08/21/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 21-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-18
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/17/2017 11:58:00 AM
Lab ID:	1708J35-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.17		mg/Kg-dry	247180	10	08/20/2017 20:26	JR
Barium	26.4	4.78		mg/Kg-dry	247180	10	08/20/2017 20:26	JR
PERCENT MOISTURE D2216								
Percent Moisture	8.26	0		wt%	R350233	1	08/21/2017 14:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear | Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1708J35**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	●	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	●	○		
5.	Custody seals intact on shipping container?	○	○	●		
6.	Temperature blanks present?	○	●	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	●	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	●	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	●	○	○		
10.	Sampler name and/or signature on COC?	●	○	○		
11.	Were all samples received within holding time?	●	○	○		
12.	TAT marked on the COC?	●	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 3.0 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 8/18/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	●	○	○		
17.	Custody seals present on sample containers?	○	●	○		
18.	Custody seals intact on sample containers?	○	○	●		
19.	Do sample container labels match the COC?	●	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	●	○	○		
21.	Were all of the samples listed on the COC received?	●	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	●	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	●	○	○		
24.	Were samples received in appropriate containers?	●	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	●		
26.	Were trip blanks submitted?	○	○	●	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 8/18/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	●		
29.	Containers meet preservation guidelines?	○	○	●		
30.	Was pH adjusted at Sample Receipt?	○	○	●		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 8/18/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708J35

ANALYTICAL QC SUMMARY REPORT

BatchID: 247180

Sample ID: **MB-247180** Client ID: Units: **ug/Kg** Prep Date: **08/18/2017** Run No: **350182**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247180** Analysis Date: **08/20/2017** Seq No: **7695314**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-247180** Client ID: Units: **ug/Kg** Prep Date: **08/18/2017** Run No: **350182**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247180** Analysis Date: **08/20/2017** Seq No: **7695315**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4278	750	5000		85.6	80	120				
Barium	4649	500	5000		93.0	80	120				

Sample ID: **1708J35-001AMS** Client ID: **RRCS-17** Units: **mg/Kg-dry** Prep Date: **08/18/2017** Run No: **350182**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247180** Analysis Date: **08/20/2017** Seq No: **7695317**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.867	4.49	4.488	1.919	88.0	75	125				
Barium	14.77	4.49	4.488	11.18	80.0	75	125				

Sample ID: **1708J35-001AMSD** Client ID: **RRCS-17** Units: **mg/Kg-dry** Prep Date: **08/18/2017** Run No: **350182**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247180** Analysis Date: **08/20/2017** Seq No: **7695318**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.931	4.48	4.484	1.919	89.5	75	125	5.867	1.08	20	
Barium	14.57	4.48	4.484	11.18	75.5	75	125	14.77	1.40	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 31, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708R46

Analytical Environmental Services, Inc. received 4 samples on 8/30/2017 10:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions for Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

AES

CHAIN OF CUSTODY

Work Order: 1708R46

Date: _____ Page _____ of _____

COMPANY:	ADDRESS: [illegible] GA 30308
PHONE:	EMAIL: [illegible]
SAMPLED BY:	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1				X		SO	X		
2		8/28/17	1?2	X		SO	X		
3		8/29/17	.:50	X		SO	X		
4		8/29/17	1322	X		SO	X		
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED: EPA 6020 As Ba

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.		1. FedEx	
2.		2. Mayfew	8/30/17 10:30
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excu
PROJECT #:
SITE ADDRESS: 155 crossgate D
SEND REPORT TO: [illegible]
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Envirol Sent to [illegible]
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc

Date: 1-Sep-17

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1708R46

Case Narrative

Sample Receiving Nonconformance:

Due to water in the cooler, Sample ID's were barely visible on the Chain of Custody for all samples, and collection date and time was not present for sample -001. Samples ID's and collection date/time were verified by Forrest Howard via email on 8/30/2017.

Analytical Environmental Services, Inc **Date:** 31-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-27
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/28/2017 1:20:00 PM
Lab ID:	1708R46-001	**Matrix:**	Solid

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.22		mg/Kg-dry	247500	10	08/30/2017 21:04	JR
Barium	10.5	0.47		mg/Kg-dry	247500	10	08/30/2017 21:04	JR
PERCENT MOISTURE D2216								
Percent Moisture	8.47	0		wt%	R351080	1	08/31/2017 16:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-28
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/28/2017 1:25:00 PM
Lab ID:	1708R46-002	**Matrix:**	Solid

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.89		mg/Kg-dry	247500	10	08/30/2017 21:10	JR
Barium	36.3	0.45		mg/Kg-dry	247500	10	08/30/2017 21:10	JR
PERCENT MOISTURE D2216								
Percent Moisture	9.40	0		wt%	R351080	1	08/31/2017 16:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-19
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/29/2017 1:20:00 PM
Lab ID:	1708R46-003	**Matrix:**	Solid

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.31		mg/Kg-dry	247500	10	08/30/2017 21:16	JR
Barium	5.13	0.49		mg/Kg-dry	247500	10	08/30/2017 21:16	JR
PERCENT MOISTURE D2216								
Percent Moisture	2.88	0		wt%	R351080	1	08/31/2017 16:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-20
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/29/2017 1:22:00 PM
Lab ID:	1708R46-004	**Matrix:**	Solid

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.50		mg/Kg-dry	247500	10	08/30/2017 21:23	JR
Barium	13.9	0.49		mg/Kg-dry	247500	10	08/30/2017 21:23	JR
PERCENT MOISTURE D2216								
Percent Moisture	6.07	0		wt%	R351080	1	08/31/2017 16:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1708R46**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	◉	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.4 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 8/30/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	○	◉	○	incomplete info ☐ illegible ■ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). AJ 8/30/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). AJ 8/30/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708R46

ANALYTICAL QC SUMMARY REPORT

BatchID: 247500

Sample ID: **MB-247500** Client ID: Units: **ug/Kg** Prep Date: **08/29/2017** Run No: **350962**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247500** Analysis Date: **08/30/2017** Seq No: **7714353**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-247500** Client ID: Units: **ug/Kg** Prep Date: **08/29/2017** Run No: **350962**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247500** Analysis Date: **08/30/2017** Seq No: **7714354**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4556	750	5000		91.1	80	120				
Barium	4719	500	5000		94.4	80	120				

Sample ID: **1708M24-008AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **08/29/2017** Run No: **350962**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247500** Analysis Date: **08/30/2017** Seq No: **7714358**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	12920	11700	9720	3071	101	75	125				
Barium	27700	19400	9720	16710	113	75	125				

Sample ID: **1708M24-008AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **08/29/2017** Run No: **350962**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **247500** Analysis Date: **08/30/2017** Seq No: **7714363**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	12580	11500	9583	3071	99.2	75	125	12920	2.72	20	
Barium	29200	19200	9583	16710	130	75	125	27700	5.29	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 08, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708641

Analytical Environmental Services, Inc. received 4 samples on 8/5/2017 11:45:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708641

Date: 8/4/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30307
PHONE: 770-296-9648
EMAIL: forrest.howard@RoseNetwork.com
SAMPLED BY: Forrest Howard
SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	RRCS-13	8/3/17	0910	X		SO	X		1
2	RRCS-14	8/3/17	0915	X		SO	X		1
3	RRCS-15	8/3/17	0920	X		SO	X		1
4	RRCS-16	8/4/17	1335	X		SO	X		1
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED: As (EPA 6020)

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/4/17 1700	1. To Fedex	
2.		2.	8/5/17 11:45AM
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to: Stephen Wilson, Forrest Howard, Mike Herman, Trent Godwin, Lee Willet

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Wansley Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd
SEND REPORT TO: In comment
INVOICE TO: GPC Environmental Affairs (IF DIFFERENT FROM ABOVE)
AES & Fedex account used
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers 4

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 8-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-13
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/3/2017 9:10:00 AM
Lab ID:	1708641-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.29		mg/Kg-dry	246550	1	08/07/2017 19:18	JR
Barium	19.4	0.55		mg/Kg-dry	246550	1	08/07/2017 19:18	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.9	0		wt%	R349221	1	08/07/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-14
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/3/2017 9:15:00 AM
Lab ID:	1708641-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.23		mg/Kg-dry	246550	1	08/07/2017 20:08	JR
Barium	11.9	0.55		mg/Kg-dry	246550	1	08/07/2017 20:08	JR
PERCENT MOISTURE D2216								
Percent Moisture	13.4	0		wt%	R349221	1	08/07/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-15
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/3/2017 9:20:00 AM
Lab ID:	1708641-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.16		mg/Kg-dry	246550	1	08/07/2017 20:14	JR
Barium	26.8	0.54		mg/Kg-dry	246550	1	08/07/2017 20:14	JR
PERCENT MOISTURE D2216								
Percent Moisture	17.1	0		wt%	R349221	1	08/07/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 8-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-16
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/4/2017 1:35:00 PM
Lab ID:	1708641-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	7.08	6.57		mg/Kg-dry	246550	1	08/07/2017 20:38	JR
Barium	12.1	0.44		mg/Kg-dry	246550	1	08/07/2017 20:38	JR
PERCENT MOISTURE D2216								
Percent Moisture	9.02	0		wt%	R349221	1	08/07/2017 13:00	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power** AES Work Order Number: **1708641**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	●	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	●	○		
5.	Custody seals intact on shipping container?	○	○	●		
6.	Temperature blanks present?	○	●	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	●	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	●	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	●	○	○		
10.	Sampler name and/or signature on COC?	●	○	○		
11.	Were all samples received within holding time?	●	○	○		
12.	TAT marked on the COC?	●	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 0.1 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TR 8/5/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	●	○	○		
17.	Custody seals present on sample containers?	○	●	○		
18.	Custody seals intact on sample containers?	○	○	●		
19.	Do sample container labels match the COC?	●	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	●	○	○		
21.	Were all of the samples listed on the COC received?	●	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	●	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	●	○	○		
24.	Were samples received in appropriate containers?	●	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	●		
26.	Were trip blanks submitted?	○	○	●	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TR 8/5/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	●		
29.	Containers meet preservation guidelines?	○	○	●		
30.	Was pH adjusted at Sample Receipt?	○	○	●		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TR 8/5/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708641

ANALYTICAL QC SUMMARY REPORT

BatchID: 246550

Sample ID: **MB-246550** Client ID: Units: **ug/Kg** Prep Date: **08/07/2017** Run No: **349234**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246550** Analysis Date: **08/07/2017** Seq No: **7673926**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246550** Client ID: Units: **ug/Kg** Prep Date: **08/07/2017** Run No: **349234**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246550** Analysis Date: **08/07/2017** Seq No: **7673927**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4428	1500	5000		88.6	80	120				
Barium	5180	500	5000		104	80	120				

Sample ID: **1708641-001AMS** Client ID: **RRCS-13** Units: **ug/Kg-dry** Prep Date: **08/07/2017** Run No: **349234**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246550** Analysis Date: **08/07/2017** Seq No: **7673931**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8290	5529	4450	49.5	75	125				S
Barium	19670	553	5529	19400	4.87	75	125				S

Sample ID: **1708641-001AMSD** Client ID: **RRCS-13** Units: **ug/Kg-dry** Prep Date: **08/07/2017** Run No: **349234**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246550** Analysis Date: **08/07/2017** Seq No: **7673932**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8300	5536	4450	51.0	75	125	7187	0	20	S
Barium	18150	554	5536	19400	-22.5	75	125	19670	8.02	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

July 25, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1707I84

Analytical Environmental Services, Inc. received 3 samples on 7/22/2017 9:50:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1707I84

Date: 7/21/17 Page 1 of 1

COMPANY: ~~GPC~~ Georgia Power Company

ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308

PHONE: 770-296-9648

EMAIL: Forrest.howard@Radiatech.com

SAMPLED BY: Forrest Howard

SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes) I	REMARKS	Number of Containers
1	RRCS-01	7/21/17	0930	X		SO	X		1
2	RRCS-02	7/21/17	0932	X		SO	X		1
3	RRCS-03	7/21/17	0936	X		SO	X		1
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED: (MA) 6020 A5 B6

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY: 1. [signature] DATE/TIME: 7/21/17

RECEIVED BY: 1. Bruce Pugh DATE/TIME: 0950 7/21/17

2.

3.

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Trent Godwin
Forrest Howard
Lee Miller
Mickie Lemon

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other:

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
~~SITE ADDRESS:~~ 155 Cross Gate Rd Port Wentworth GA
SEND REPORT TO:
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 3

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 25-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-01
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/21/2017 9:30:00 AM
Lab ID:	1707I84-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.12		mg/Kg-dry	245884	5	07/25/2017 03:47	JR
Barium	35.8	2.04		mg/Kg-dry	245884	5	07/25/2017 03:47	JR
PERCENT MOISTURE D2216								
Percent Moisture	6.83	0		wt%	R348170	1	07/24/2017 14:00	JC

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 25-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/21/2017 9:32:00 AM
Lab ID:	1707I84-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.47		mg/Kg-dry	245884	5	07/25/2017 04:18	JR
Barium	2.87	1.82		mg/Kg-dry	245884	5	07/25/2017 04:18	JR
PERCENT MOISTURE D2216								
Percent Moisture	16.2	0		wt%	R348170	1	07/24/2017 14:00	JC

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 25-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-03
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/21/2017 9:36:00 AM
Lab ID:	1707I84-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.12		mg/Kg-dry	245884	5	07/25/2017 04:24	JR
Barium	7.83	2.37		mg/Kg-dry	245884	5	07/25/2017 04:24	JR
PERCENT MOISTURE D2216								
Percent Moisture	23.1	0		wt%	R348170	1	07/24/2017 14:00	JC

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER** AES Work Order Number: **1707I84**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	○	◉	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 3.1 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). BB 7/22/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). BB 7/22/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). BB 7/22/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1707I84

ANALYTICAL QC SUMMARY REPORT

BatchID: 245884

Sample ID: **MB-245884** Client ID: Units: **ug/Kg** Prep Date: **07/24/2017** Run No: **348227**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **245884** Analysis Date: **07/25/2017** Seq No: **7649750**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-245884** Client ID: Units: **ug/Kg** Prep Date: **07/24/2017** Run No: **348227**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **245884** Analysis Date: **07/25/2017** Seq No: **7649751**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4381	1500	5000	58.85	86.4	80	120				
Barium	4883	500	5000		97.7	80	120				

Sample ID: **1707I84-001AMS** Client ID: **RRCS-01** Units: **mg/Kg-dry** Prep Date: **07/24/2017** Run No: **348227**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **245884** Analysis Date: **07/25/2017** Seq No: **7649753**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	6.13	4.088	2.103	67.2	75	125				S
Barium	54.21	2.04	4.088	35.77	451	75	125				S

Sample ID: **1707I84-001AMSD** Client ID: **RRCS-01** Units: **mg/Kg-dry** Prep Date: **07/24/2017** Run No: **348227**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **245884** Analysis Date: **07/25/2017** Seq No: **7649754**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	6.11	4.071	2.103	70.4	75	125	4.851	0	20	S
Barium	39.97	2.04	4.071	35.77	103	75	125	54.21	30.2	20	R

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

July 27, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1707L13

Analytical Environmental Services, Inc. received 5 samples on 7/26/2017 10:20:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 170713

Date: 7/24/17 (5) Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
PHONE: 770-296-9648
EMAIL: forrest.howard@RossUtech.com
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED: EPA 6020 As Ba

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes) I	REMARKS	Number of Containers
1	RRCS-04	7/24/17	1130	X		SO	X		1
2	RRCS-05	7/24/17	1135	X		SO	X		1
3	RRCS-06	7/24/17	1140	X		SO	X		1
4	RRCS-07	7/24/17	0740	X		SO	X		1
5	RRCS-08	7/24/17	0742	X		SO	X		1
6									
7									
8									
9									
10									
11									
12									
13									
14									

RELINQUISHED BY: DATE/TIME:
1. 7/24/17 1736
2.
3.

RECEIVED BY: DATE/TIME:
1. To Fedex 7/26/17 10:20
2.
3.

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Trent Cochran
Forrest Howard
Lee Millet
Nick Heuman

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Portwentworth
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 5

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 27-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-04
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/22/2017 11:30:00 AM
Lab ID:	1707L13-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.18		mg/Kg-dry	246020	1	07/26/2017 23:17	JR
Barium	5.08	0.34		mg/Kg-dry	246020	1	07/26/2017 23:17	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.9	0		wt%	R348482	1	07/27/2017 15:30	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-05
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/22/2017 11:35:00 AM
Lab ID:	1707L13-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.00		mg/Kg-dry	246020	1	07/26/2017 22:46	JR
Barium	33.6	0.47		mg/Kg-dry	246020	1	07/26/2017 22:46	JR
PERCENT MOISTURE D2216								
Percent Moisture	8.04	0		wt%	R348482	1	07/27/2017 15:30	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-06
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/22/2017 11:40:00 AM
Lab ID:	1707L13-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.74		mg/Kg-dry	246020	1	07/26/2017 23:23	JR
Barium	10.2	0.38		mg/Kg-dry	246020	1	07/26/2017 23:23	JR
PERCENT MOISTURE D2216								
Percent Moisture	13.3	0		wt%	R348482	1	07/27/2017 15:30	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-07
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/24/2017 7:40:00 AM
Lab ID:	1707L13-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.76		mg/Kg-dry	246020	1	07/27/2017 13:12	JR
Barium	21.3	0.45		mg/Kg-dry	246020	1	07/27/2017 13:12	JR
PERCENT MOISTURE D2216								
Percent Moisture	26.3	0		wt%	R348482	1	07/27/2017 15:30	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-08
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/24/2017 7:42:00 AM
Lab ID:	1707L13-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.73		mg/Kg-dry	246020	1	07/27/2017 13:18	JR
Barium	15.3	0.52		mg/Kg-dry	246020	1	07/27/2017 13:18	JR
PERCENT MOISTURE D2216								
Percent Moisture	21.1	0		wt%	R348482	1	07/27/2017 15:30	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GEORGIA POWER CO** AES Work Order Number: **1707L12**

2. Carrier: FedEx ☐ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	◉	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.9 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TH 7/26/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TH 7/26/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TH 7/26/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1707L13

ANALYTICAL QC SUMMARY REPORT

BatchID: 246020

Sample ID: **MB-246020** Client ID: Units: **ug/Kg** Prep Date: **07/26/2017** Run No: **348426**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246020** Analysis Date: **07/26/2017** Seq No: **7654452**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246020** Client ID: Units: **ug/Kg** Prep Date: **07/26/2017** Run No: **348426**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246020** Analysis Date: **07/26/2017** Seq No: **7654455**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4716	1500	5000		94.3	80	120				
Barium	5185	500	5000		104	80	120				

Sample ID: **1707L13-002AMS** Client ID: **RRCS-05** Units: **ug/Kg-dry** Prep Date: **07/26/2017** Run No: **348426**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246020** Analysis Date: **07/26/2017** Seq No: **7654457**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5767	1400	4651	1556	90.5	75	125				
Barium	28850	465	4651	33590	-102	75	125				S

Sample ID: **1707L13-002AMSD** Client ID: **RRCS-05** Units: **ug/Kg-dry** Prep Date: **07/26/2017** Run No: **348426**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246020** Analysis Date: **07/26/2017** Seq No: **7654458**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5636	1400	4677	1556	87.2	75	125	5767	2.31	20	
Barium	27100	468	4677	33590	-139	75	125	28850	6.24	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

July 31, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1707N96

Analytical Environmental Services, Inc. received 4 samples on 7/28/2017 10:15:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1707N96

Date: 7/27/17 Page 1 of 1

COMPANY: GPC Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
PHONE: 770 246 8648	EMAIL: forrest.howard@Roadrunner.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: As, Ba, EPA 6010C	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	RRCS-09	7/26/17	1130	X		SO	X	X		1
2	RRCS-10	7/26/17	1430	X		SO	X	X		1
3	RRCS-11	7/27/17	1304	X		SO	X	X		1
4	RRCS-12	7/27/17	1308	X		SO	X	X		1
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	7/27/17 1700	1. To fedex	
2.		2. Tonya Shaw	7/28/17 1015
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Forrest Howard
Trent Godbum
Lee Willet
Nick Helmey

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 cross gate Rd Portsmouth GA
SEND REPORT TO: Comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
w/ AFE & Account
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 4

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 31-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-09
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/26/2017 11:30:00 AM
Lab ID:	1707N96-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.27		mg/Kg-dry	246145	5	07/28/2017 21:12	JR
Barium	6.98	3.03		mg/Kg-dry	246145	5	07/28/2017 21:12	JR
PERCENT MOISTURE D2216								
Percent Moisture	20.4	0		wt%	R348673	1	07/31/2017 14:00	JC

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-10
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/26/2017 2:30:00 PM
Lab ID:	1707N96-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.47		mg/Kg-dry	246145	5	07/28/2017 21:43	JR
Barium	21.0	2.77		mg/Kg-dry	246145	5	07/28/2017 21:43	JR
PERCENT MOISTURE D2216								
Percent Moisture	16.1	0		wt%	R348673	1	07/31/2017 14:00	JC

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-11
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/27/2017 1:04:00 PM
Lab ID:	1707N96-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	38.9	7.25		mg/Kg-dry	246145	5	07/28/2017 21:49	JR
Barium	139	2.68		mg/Kg-dry	246145	5	07/28/2017 21:49	JR
PERCENT MOISTURE D2216								
Percent Moisture	15.5	0		wt%	R348673	1	07/31/2017 14:00	JC

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	RRCS-12
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/27/2017 1:08:00 PM
Lab ID:	1707N96-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.43		mg/Kg-dry	246145	5	07/28/2017 22:20	JR
Barium	39.0	2.65		mg/Kg-dry	246145	5	07/28/2017 22:20	JR
PERCENT MOISTURE D2216								
Percent Moisture	26.2	0		wt%	R348673	1	07/31/2017 14:00	JC

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1707N96**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	○	◉	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 2.8 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 7/28/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 7/28/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 7/28/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1707N96

ANALYTICAL QC SUMMARY REPORT

BatchID: 246145

Sample ID: **MB-246145** Client ID: Units: **ug/Kg** Prep Date: **07/28/2017** Run No: **348681**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246145** Analysis Date: **07/28/2017** Seq No: **7660283**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246145** Client ID: Units: **ug/Kg** Prep Date: **07/28/2017** Run No: **348681**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246145** Analysis Date: **07/28/2017** Seq No: **7660284**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4384	4300	5000		87.7	80	120				
Barium	4974	500	5000		99.5	80	120				

Sample ID: **1707N96-001AMS** Client ID: **RRCS-09** Units: **mg/Kg-dry** Prep Date: **07/28/2017** Run No: **348681**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246145** Analysis Date: **07/28/2017** Seq No: **7660288**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.26	6.046	0.6269	85.4	75	125				
Barium	11.86	3.02	6.046	6.982	80.6	75	125				

Sample ID: **1707N96-001AMSD** Client ID: **RRCS-09** Units: **mg/Kg-dry** Prep Date: **07/28/2017** Run No: **348681**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246145** Analysis Date: **07/28/2017** Seq No: **7660291**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.28	6.067	0.6269	86.2	75	125	5.792	0	20	
Barium	11.89	3.03	6.067	6.982	80.9	75	125	11.86	0.296	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 27, 2018

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1802K91

Analytical Environmental Services, Inc. received 1 samples on 2/22/2018 11:20:00 AM
for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18. State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Paris Masoudi

Paris Masoudi

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1802K91

Date: 2/21/18 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Rd SE B10185 Atlanta GA 30308
PHONE: 770-296-9648	EMAIL: forrest.howard@resolutea.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA6020 As Ba	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	RVCS-135W-B	2/21/18	1400	X		SO	X	X		1
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	2/21/18 1700	1. To Fedex	
2.		2.	2/22/18 11:30
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Forrest Howard
Kevin Stephenson
Lea Miller
Trent Goodman
Stephen Willson

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Creekgate Rd Dartmouth GA
SEND REPORT TO: Report to, in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 1

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1802K91

Case Narrative

Per Forrest Howard via phone on 2/26/18, laboratory proceeded with same day rush analysis for results by Monday, 2/26/18.

Analytical Environmental Services, Inc **Date:** 27-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-135W-B
Project Name	Plant Kraft Excavation	**Collection Date:**	2/21/2018 2:00:00 PM
Lab ID:	1802K91-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	32.8	9.35		mg/Kg-dry	256439	50	02/26/2018 16:25	DP
Barium	651	12.5		mg/Kg-dry	256439	20	02/26/2018 15:11	DP
PERCENT MOISTURE D2216								
Percent Moisture	35.2	0		wt%	R363937	1	02/26/2018 15:15	CG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name Plant Kraft Excavation
Workorder: 1802K91

ANALYTICAL QC SUMMARY REPORT

BatchID: 256439

Sample ID: **MB-256439** Client ID: Units: **ug/Kg** Prep Date: **02/26/2018** Run No: **363947**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **256439** Analysis Date: **02/26/2018** Seq No: **8043145**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-256439** Client ID: Units: **ug/Kg** Prep Date: **02/26/2018** Run No: **363947**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **256439** Analysis Date: **02/26/2018** Seq No: **8043146**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	6247	5500	5000	115.2	123	80	120				S
Barium	5165	500	5000		103	80	120				

Sample ID: **LCS-256439** Client ID: Units: **ug/Kg** Prep Date: **02/26/2018** Run No: **363947**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **256439** Analysis Date: **02/26/2018** Seq No: **8043568**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5865	5000	5000	115.2	115	80	120				

Sample ID: **1802K91-001AMS** Client ID: **RVCS-135W-B** Units: **mg/Kg-dry** Prep Date: **02/26/2018** Run No: **363947**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **256439** Analysis Date: **02/26/2018** Seq No: **8043148**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	596.3	12.5	6.253	651.4	-882	75	125				S

Sample ID: **1802K91-001AMS** Client ID: **RVCS-135W-B** Units: **mg/Kg-dry** Prep Date: **02/26/2018** Run No: **363947**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **256439** Analysis Date: **02/26/2018** Seq No: **8043156**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	36.90	9.38	6.253	32.81	65.5	75	125				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name Plant Kraft Excavation
Workorder: 1802K91

ANALYTICAL QC SUMMARY REPORT

BatchID: 256439

Sample ID: **1802K91-001AMSD** Client ID: **RVCS-135W-B** Units: **mg/Kg-dry** Prep Date: **02/26/2018** Run No: **363947**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **256439** Analysis Date: **02/26/2018** Seq No: **8043150**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	619.2	12.5	6.260	651.4	-515	75	125	596.3	3.77	20	S

Sample ID: **1802K91-001AMSD** Client ID: **RVCS-135W-B** Units: **mg/Kg-dry** Prep Date: **02/26/2018** Run No: **363947**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **256439** Analysis Date: **02/26/2018** Seq No: **8043157**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	39.29	9.39	6.260	32.81	104	75	125	36.90	6.28	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 04, 2017

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1712125

Analytical Environmental Services, Inc. received 2 samples on 12/2/2017 9:35:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

Work Order: 17I2125

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Date: 11/30/17 Page 1 of 1

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd SE Bldg 5 Atlanta, GA 30308
PHONE: 678-548-9415	EMAIL:
SAMPLED BY: Kevin Stephenson	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes) NA	REMARKS	Number of Containers
1	RVCS-3	11/30/17	1058	X		SO	1		1
2	RVCS-4	12/1/17	0942	X		SO	1	—	1
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Kevin Stephenson		1. FedEx	
2.		2. Miriam Powers	12/2/2017 9:35 AM
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Reporting: Kevin Stephenson, Stephen Wilson, Trent Cochran, Forrest Hardwick, Lee Mullet

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Road
SEND REPORT TO:
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental Affairs
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 2

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush **(auth req.)**
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW= Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 4-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-3
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/30/2017 10:58:00 AM
Lab ID:	1712125-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.25		mg/Kg-dry	251902	20	12/04/2017 13:49	TA
Barium	20.4	9.55		mg/Kg-dry	251902	20	12/04/2017 13:49	TA
PERCENT MOISTURE D2216								
Percent Moisture	6.93	0		wt%	R358069	1	12/04/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-4
Project Name:	Plant Kraft Excavation	**Collection Date:**	12/1/2017 9:42:00 AM
Lab ID:	1712125-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.23		mg/Kg-dry	251902	20	12/04/2017 14:04	TA
Barium	23.2	6.70		mg/Kg-dry	251902	20	12/04/2017 14:04	TA
PERCENT MOISTURE D2216								
Percent Moisture	11.5	0		wt%	R358069	1	12/04/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1712125**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	◉	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 0.9 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 12/2/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). MJ 12/2/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). MJ 12/2/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1712125

ANALYTICAL QC SUMMARY REPORT

BatchID: 251902

Sample ID: **MB-251902** Client ID: Units: **ug/Kg** Prep Date: **12/04/2017** Run No: **358096**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251902** Analysis Date: **12/04/2017** Seq No: **7893509**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-251902** Client ID: Units: **ug/Kg** Prep Date: **12/04/2017** Run No: **358096**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251902** Analysis Date: **12/04/2017** Seq No: **7893510**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	6055	6000	5000	206.3	117	80	120				
Barium	5305	500	5000		106	80	120				

Sample ID: **1712125-001AMS** Client ID: **RVCS-3** Units: **mg/Kg-dry** Prep Date: **12/04/2017** Run No: **358096**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251902** Analysis Date: **12/04/2017** Seq No: **7893512**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.956	3.83	4.784	1.832	65.3	75	125				S
Barium	25.33	9.57	4.784	20.36	104	75	125				

Sample ID: **1712125-001AMSD** Client ID: **RVCS-3** Units: **mg/Kg-dry** Prep Date: **12/04/2017** Run No: **358096**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **251902** Analysis Date: **12/04/2017** Seq No: **7893513**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.085	3.82	4.780	1.832	68.0	75	125	4.956	2.55	20	S
Barium	27.18	9.56	4.780	20.36	143	75	125	25.33	7.08	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 11, 2017

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1712627

Analytical Environmental Services, Inc. received 3 samples on 12/7/2017 10:43:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1712627

Date: 12/6/17 Page 1 of 1

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd SE B0185 Atlanta, GA 30308
PHONE: 678-548-9413	EMAIL: Kevin.Stephenson@southernco.com
SAMPLED BY: Kevin Stephenson	SIGNATURE:

ANALYSIS REQUESTED

Filtered (Y/N)

PRESERVATION (see codes)

NA

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	Number of Containers	REMARKS
1	RVCS-5	12/4/17	1202	X		SO	1	
2	RVCS-6	12/5/17	1232	X		SO	1	
3	RVCS-7	12/6/17	1600	X		SO	1	
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Kevin Stephenson		1. KWS 12/7/17 FedEx AES	12/7/17 @ 1043 KWS 12/7/17
2.		2. Pam Masanch	12/07/17 10:43
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report To:
Kevin Stephenson
Stephen Wilson
Trent Cobourn
Thomas Hagood
Lee Nyllot

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
(client) FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Road
SEND REPORT TO:
INVOICE TO:
(IF DIFFERENT FROM ABOVE)
GA Environmental Affairs
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 3

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 11-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-5
Project Name:	Plant Kraft Excavation	**Collection Date:**	12/4/2017 12:02:00 PM
Lab ID:	1712627-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.44		mg/Kg-dry	252610	20	12/08/2017 13:21	TA
Barium	18.6	11.4		mg/Kg-dry	252610	20	12/08/2017 13:21	TA
PERCENT MOISTURE D2216								
Percent Moisture	13.5	0		wt%	R358458	1	12/08/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-6
Project Name:	Plant Kraft Excavation	**Collection Date:**	12/5/2017 12:32:00 PM
Lab ID:	1712627-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	7.92	7.34		mg/Kg-dry	252610	20	12/08/2017 13:37	TA
Barium	14.6	8.06		mg/Kg-dry	252610	20	12/08/2017 13:37	TA
PERCENT MOISTURE D2216								
Percent Moisture	11.9	0		wt%	R358458	1	12/08/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-7
Project Name:	Plant Kraft Excavation	**Collection Date:**	12/6/2017 10:00:00 AM
Lab ID:	1712627-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.33		mg/Kg-dry	252610	20	12/08/2017 13:39	TA
Barium	28.9	8.62		mg/Kg-dry	252610	20	12/08/2017 13:39	TA
PERCENT MOISTURE D2216								
Percent Moisture	13.6	0		wt%	R358458	1	12/08/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1712627

ANALYTICAL QC SUMMARY REPORT

BatchID: 252610

Sample ID: **MB-252610** Client ID: Units: **ug/Kg** Prep Date: **12/08/2017** Run No: **358461**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **252610** Analysis Date: **12/08/2017** Seq No: **7902981**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	4500									
Barium	BRL	500									

Sample ID: **LCS-252610** Client ID: Units: **ug/Kg** Prep Date: **12/08/2017** Run No: **358461**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **252610** Analysis Date: **12/08/2017** Seq No: **7902982**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4526	4500	5000	245.6	85.6	80	120				
Barium	5227	500	5000		105	80	120				

Sample ID: **1712627-001AMS** Client ID: **RVCS-5** Units: **mg/Kg-dry** Prep Date: **12/08/2017** Run No: **358461**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **252610** Analysis Date: **12/08/2017** Seq No: **7902984**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	6.354	6.18	5.720	1.544	84.1	75	125				
Barium	23.79	11.4	5.720	18.57	91.2	75	125				

Sample ID: **1712627-001AMSD** Client ID: **RVCS-5** Units: **mg/Kg-dry** Prep Date: **12/08/2017** Run No: **358461**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **252610** Analysis Date: **12/08/2017** Seq No: **7902987**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7.739	6.18	5.721	1.544	108	75	125	6.354	19.7	20	
Barium	26.34	11.4	5.721	18.57	136	75	125	23.79	10.1	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 05, 2018

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1802134

Analytical Environmental Services, Inc. received 6 samples on 2/2/2018 8:00:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Paris Masoudi

Paris Masoudi

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1802134

Date: 2/1/18 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
PHONE: 770-296-9648
EMAIL: forrest.howard@Resolute-ev.com
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED: CPAG020 As Ba

PRESERVATION (see codes): I

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	DSCS-01	1/29/18	1215	X		SO	X		1
2	DSCS-02	1/29/18	1230	X		SO	X		1
3	DSCS-03	1/30/18	0950	X		SO	X		1
4	DSCS-04	1/30/18	1320	X		SO	X		1
5	DSCS-05	1/31/18	1500	X		SO	X		1
6	RVCS-12.5W	1/31/18	1030	X		SO	X		1
7									
8									
9									
10									
11									
12									
13									
14									

RELINQUISHED BY: DATE/TIME:
1. 2/1/18 1500
2. 2/2/18 0800
3.

RECEIVED BY: DATE/TIME:
1. [redacted]
2. 2/2/18 0800
3.

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 156 crossgate Rd Kentwentworth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 6

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (If any):
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Forrest Howard
Kevin Stephenson
Lea Millet
Trent Godwin
Stephen Willson

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other:

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1802134

Case Narrative

Metals Analysis by Method 6020B:

Due to sample matrix, sample 1802134-001A, -002A, -003A, -004A, and -005A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	DSCS-01
Project Name:	Plant Kraft Excavation	**Collection Date:**	1/29/2018 12:15:00 PM
Lab ID:	1802134-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.84		mg/Kg-dry	255179	20	02/05/2018 15:29	DP
Barium	45.2	0.87		mg/Kg-dry	255179	20	02/05/2018 15:29	DP
PERCENT MOISTURE D2216								
Percent Moisture	12.7	0		wt%	R362317	1	02/05/2018 13:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	DSCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	1/29/2018 12:20:00 PM
Lab ID:	1802134-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.94		mg/Kg-dry	255179	20	02/05/2018 15:44	DP
Barium	40.9	10.6		mg/Kg-dry	255179	20	02/05/2018 15:44	DP
PERCENT MOISTURE D2216								
Percent Moisture	14.4	0		wt%	R362317	1	02/05/2018 13:30	AK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	DSCS-03
Project Name:	Plant Kraft Excavation	**Collection Date:**	1/30/2018 9:50:00 AM
Lab ID:	1802134-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.21		mg/Kg-dry	255179	20	02/05/2018 15:46	DP
Barium	42.6	9.12		mg/Kg-dry	255179	20	02/05/2018 15:46	DP
PERCENT MOISTURE D2216								
Percent Moisture	11.3	0		wt%	R362317	1	02/05/2018 13:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	DSCS-04
Project Name:	Plant Kraft Excavation	**Collection Date:**	1/30/2018 1:20:00 PM
Lab ID:	1802134-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.82		mg/Kg-dry	255179	20	02/05/2018 15:48	DP
Barium	78.3	11.2		mg/Kg-dry	255179	20	02/05/2018 15:48	DP
PERCENT MOISTURE D2216								
Percent Moisture	18.7	0		wt%	R362317	1	02/05/2018 13:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	DSCS-05
Project Name:	Plant Kraft Excavation	**Collection Date:**	1/31/2018 3:00:00 PM
Lab ID:	1802134-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.80		mg/Kg-dry	255179	20	02/05/2018 15:50	DP
Barium	16.2	7.09		mg/Kg-dry	255179	20	02/05/2018 15:50	DP
PERCENT MOISTURE D2216								
Percent Moisture	6.46	0		wt%	R362317	1	02/05/2018 13:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-12-SW
Project Name:	Plant Kraft Excavation	**Collection Date:**	1/31/2018 10:30:00 AM
Lab ID:	1802134-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	24.5	7.63		mg/Kg-dry	255179	20	02/05/2018 15:52	DP
Barium	113	7.63		mg/Kg-dry	255179	20	02/05/2018 15:52	DP
PERCENT MOISTURE D2216								
Percent Moisture	17.4	0		wt%	R362317	1	02/05/2018 13:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1802134**

2. Carrier: FedEx ☐ UPS ☐ USPS ☐ Client ■ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	○	◉	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.3 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 2/2/18

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 2/2/18

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 2/2/18

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1802134

ANALYTICAL QC SUMMARY REPORT

BatchID: 255179

Sample ID: **MB-255179** Client ID: Units: **ug/Kg** Prep Date: **02/02/2018** Run No: **362352**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **255179** Analysis Date: **02/05/2018** Seq No: **8004228**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-255179** Client ID: Units: **ug/Kg** Prep Date: **02/02/2018** Run No: **362352**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **255179** Analysis Date: **02/05/2018** Seq No: **8004229**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4482	4000	5000	113.3	87.4	80	120				
Barium	5121	500	5000		102	80	120				

Sample ID: **1802134-001AMS** Client ID: **DSCS-01** Units: **mg/Kg-dry** Prep Date: **02/02/2018** Run No: **362352**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **255179** Analysis Date: **02/05/2018** Seq No: **8004233**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7.87	4.371	2.555	100	75	125				
Barium	55.63	8.74	4.371	45.19	239	75	125				S

Sample ID: **1802134-001AMSD** Client ID: **DSCS-01** Units: **mg/Kg-dry** Prep Date: **02/02/2018** Run No: **362352**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **255179** Analysis Date: **02/05/2018** Seq No: **8004234**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	131	4.360	2.555	108	75	125	6.930	0	20	
Barium	72.25	8.72	4.360	45.19	621	75	125	55.63	26.0	20	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 01, 2017

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1711P96

Analytical Environmental Services, Inc. received 2 samples on 11/30/2017 11:10:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1711P96

Date: 11/29/17 Page 1 of 1

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd SE BIN 65 Atlanta GA 30308
PHONE: 678-548-9415	EMAIL: kevin.stephenson@readyhealth.com
SAMPLED BY: Kevin Stephenson	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	RVCS-1	11/28/17	1350	X		SO	1		1
2	RVCS-2	11/28/17	1136	X		SO	1		1
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED: Excess As, Ba

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Kevin Stephenson		1. FedEx	
2.		2.	11/30/17 11:10am
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to Kevin Stephenson, Stephen Wilson, Trent Godwin, Forrest Howard, Lee Mullet

SHIPMENT METHOD
OUT: 11/29/17 VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Branch
PROJECT #:
SITE ADDRESS: 155 Crossgate Road
SEND REPORT TO:
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental Affairs
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 2

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 1-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-1
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/28/2017 1:50:00 PM
Lab ID:	1711P96-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.72		mg/Kg-dry	252215	20	12/01/2017 10:29	TA
Barium	29.6	7.65		mg/Kg-dry	252215	20	12/01/2017 10:29	TA
PERCENT MOISTURE D2216								
Percent Moisture	16.8	0		wt%	R357988	1	12/01/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 1-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-2
Project Name:	Plant Kraft Excavation	**Collection Date:**	11/29/2017 11:36:00 AM
Lab ID:	1711P96-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.87		mg/Kg-dry	252215	20	12/01/2017 10:39	TA
Barium	45.4	11.7		mg/Kg-dry	252215	20	12/01/2017 10:39	TA
PERCENT MOISTURE D2216								
Percent Moisture	16.2	0		wt%	R357988	1	12/01/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1711P96

ANALYTICAL QC SUMMARY REPORT

BatchID: 252215

Sample ID: **MB-252215** Client ID: Units: **ug/Kg** Prep Date: **11/30/2017** Run No: **357983**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **252215** Analysis Date: **12/01/2017** Seq No: **7890960**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-252215** Client ID: Units: **ug/Kg** Prep Date: **11/30/2017** Run No: **357983**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **252215** Analysis Date: **12/01/2017** Seq No: **7890961**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4070	4000	5000		81.4	80	120				
Barium	4727	500	5000		94.5	80	120				

Sample ID: **1711P96-001AMS** Client ID: **RVCS-1** Units: **mg/Kg-dry** Prep Date: **11/30/2017** Run No: **357983**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **252215** Analysis Date: **12/01/2017** Seq No: **7890963**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	6.323	6.11	3.818	3.926	62.8	75	125				S
Barium	38.24	7.64	3.818	29.60	226	75	125				S

Sample ID: **1711P96-001AMSD** Client ID: **RVCS-1** Units: **mg/Kg-dry** Prep Date: **11/30/2017** Run No: **357983**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **252215** Analysis Date: **12/01/2017** Seq No: **7890964**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7.002	6.10	3.809	3.926	80.7	75	125	6.323	10.2	20	
Barium	38.45	7.62	3.809	29.60	232	75	125	38.24	0.532	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc **Date:** 15-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-8
Project Name:	Plant Kraft Excavation	**Collection Date:**	12/11/2017 1:34:00 PM
Lab ID:	1712E00-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.44		mg/Kg-dry	252951	20	12/15/2017 13:29	TA
Barium	31.4	7.75		mg/Kg-dry	252951	20	12/15/2017 13:29	TA
PERCENT MOISTURE D2216								
Percent Moisture	15.4	0		wt%	R359059	1	12/15/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-9
Project Name:	Plant Kraft Excavation	**Collection Date:**	12/12/2017 10:44:00 AM
Lab ID:	1712E00-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.32		mg/Kg-dry	252951	20	12/15/2017 13:37	TA
Barium	20.3	6.91		mg/Kg-dry	252951	20	12/15/2017 13:37	TA
PERCENT MOISTURE D2216								
Percent Moisture	12.8	0		wt%	R359059	1	12/15/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-10
Project Name:	Plant Kraft Excavation	**Collection Date:**	12/13/2017 9:48:00 AM
Lab ID:	1712E00-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.22		mg/Kg-dry	252951	20	12/15/2017 13:39	TA
Barium	20.8	10.9		mg/Kg-dry	252951	20	12/15/2017 13:39	TA
PERCENT MOISTURE D2216								
Percent Moisture	9.75	0		wt%	R359059	1	12/15/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Dec-17

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-11SW
Project Name:	Plant Kraft Excavation	**Collection Date:**	12/13/2017 9:54:00 AM
Lab ID:	1712E00-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.43		mg/Kg-dry	252951	20	12/15/2017 13:20	TA
Barium	28.8	10.0		mg/Kg-dry	252951	20	12/15/2017 13:20	TA
PERCENT MOISTURE D2216								
Percent Moisture	9.48	0		wt%	R359059	1	12/15/2017 13:00	OO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 20, 2018

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Lea Millet: Order No: 1802F18

Analytical Environmental Services, Inc. received 4 samples on 2/16/2018 8:06:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18. State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Paris Masoudi

Paris Masoudi

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1902F19

Date: 2/18/18 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308
PHONE: 770-296-9648	EMAIL: forrest.howard@Resolute enviro.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: 6PA6020 As Ba	PRESERVATION (see codes): H	REMARKS	Number of Containers
1	DSCS-07	2/12/18	1500	X		SO		X		1
2	DSCS-08	2/13/18	1105	X		SO		X		1
3	RVCS-13SW	2/14/18	0900	X		SO		X		1
4	RVCS-14SW	2/14/18	0925	X		SO		X		1
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	2/16/18 0806	1.	2/16/18 806
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stepten Wilson
Trent Godwin
Forrest Howard
Kevin Stephenson
Lea M. Hall

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 crossgate Rd Port Wentworth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 4

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 20-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	DSCS-07
Project Name	Plant Kraft Excavation	**Collection Date:**	2/12/2018 3:00:00 PM
Lab ID:	1802F18-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.34		mg/Kg-dry	255970	20	02/19/2018 13:55	DP
Barium	30.3	0.52		mg/Kg-dry	255970	20	02/19/2018 13:55	DP
PERCENT MOISTURE D2216								
Percent Moisture	15.1	0		wt%	R363370	1	02/19/2018 13:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	DSCS-08
Project Name	Plant Kraft Excavation	**Collection Date:**	2/13/2018 11:05:00 AM
Lab ID:	1802F18-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.34		mg/Kg-dry	255970	20	02/19/2018 13:28	DP
Barium	47.0	0.56		mg/Kg-dry	255970	20	02/19/2018 13:28	DP
PERCENT MOISTURE D2216								
Percent Moisture	11.4	0		wt%	R363370	1	02/19/2018 13:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-13SW
Project Name	Plant Kraft Excavation	**Collection Date:**	2/14/2018 9:00:00 AM
Lab ID:	1802F18-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	50.6	8.94		mg/Kg-dry	255970	50	02/19/2018 13:43	DP
Barium	200	0.60		mg/Kg-dry	255970	50	02/19/2018 13:43	DP
PERCENT MOISTURE D2216								
Percent Moisture	34.9	0		wt%	R363370	1	02/19/2018 13:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-Feb-18

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-14SW
Project Name	Plant Kraft Excavation	**Collection Date:**	2/14/2018 9:25:00 AM
Lab ID:	1802F18-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	40.8	12.9		mg/Kg-dry	255970	50	02/19/2018 13:45	DP
Barium	243	0.86		mg/Kg-dry	255970	50	02/19/2018 13:45	DP
PERCENT MOISTURE D2216								
Percent Moisture	43.5	0		wt%	R363370	1	02/19/2018 13:30	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1802F18**

2. Carrier: FedEx ☐ UPS ☐ USPS ☐ Client ■ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	●	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	●	○		
5.	Custody seals intact on shipping container?	○	○	●		
6.	Temperature blanks present?	○	●	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	●	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	●	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	●	○	○		
10.	Sampler name and/or signature on COC?	●	○	○		
11.	Were all samples received within holding time?	●	○	○		
12.	TAT marked on the COC?	●	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 0.9 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). EDM 2/16/18

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	●	○	○		
17.	Custody seals present on sample containers?	○	●	○		
18.	Custody seals intact on sample containers?	○	○	●		
19.	Do sample container labels match the COC?	●	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	●	○	○		
21.	Were all of the samples listed on the COC received?	●	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	●	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	●	○	○		
24.	Were samples received in appropriate containers?	●	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	●		
26.	Were trip blanks submitted?	○	○	●	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). EDM 2/16/18

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	●		
29.	Containers meet preservation guidelines?	○	○	●		
30.	Was pH adjusted at Sample Receipt?	○	○	●		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). EDM 2/16/18

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name Plant Kraft Excavation
Workorder: 1802F18

ANALYTICAL QC SUMMARY REPORT

BatchID: 255970

Sample ID: **MB-255970**	Client ID:			Units: **ug/Kg**	Prep Date: **02/16/2018**	Run No: **363392**
SampleType: **MBLK**	TestCode: **Metals by ICP/MS SW6020B**			BatchID: **255970**	Analysis Date: **02/19/2018**	Seq No: **8028519**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-255970**	Client ID:			Units: **ug/Kg**	Prep Date: **02/16/2018**	Run No: **363392**
SampleType: **LCS**	TestCode: **Metals by ICP/MS SW6020B**			BatchID: **255970**	Analysis Date: **02/19/2018**	Seq No: **8028520**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	6016	5500	5000	95.14	118	80	120				
Barium	5068	500	5000		101	80	120				

Sample ID: **1802F18-001AMS**	Client ID: **DSCS-07**			Units: **mg/Kg-dry**	Prep Date: **02/16/2018**	Run No: **363392**
SampleType: **MS**	TestCode: **Metals by ICP/MS SW6020B**			BatchID: **255970**	Analysis Date: **02/19/2018**	Seq No: **8028531**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	6.405	5.25	4.371	2.683	85.2	75	125				
Barium	35.34	8.74	4.371	30.25	116	75	125				

Sample ID: **1802F18-001AMSD**	Client ID: **DSCS-07**			Units: **mg/Kg-dry**	Prep Date: **02/16/2018**	Run No: **363392**
SampleType: **MSD**	TestCode: **Metals by ICP/MS SW6020B**			BatchID: **255970**	Analysis Date: **02/19/2018**	Seq No: **8028532**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	6.114	5.24	4.371	2.683	78.5	75	125	6.405	4.65	20	
Barium	28.65	8.74	4.371	30.25	-36.7	75	125	35.34	20.9	20	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

June 12, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1706866

Analytical Environmental Services, Inc. received 2 samples on 6/9/2017 9:20:00 AM
for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/16-06/30/17 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive Atlanta GA 30340- 3906

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1706866

Date: 6/8/17 Page 1 of 1

NY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
770-296-9648	FAX: forrest.howard@Resolutecw.com
ED BY: Forrest Howard	SIGNATURE:

ANALYSIS REQUESTED: EPA 6020 Sb, As, Ni, Tl

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	REMARKS	No # of Containers
						T		
SBCS-01	6/8/17	1150	X		SO	X		1
SBCS-02	6/8/17	1152	X		SO	X		1

QUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	6/8/17 1700	1: fufedex	
		2:	6/9/17 9:20
		3: (FedEx)	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation

PROJECT #:

SITE ADDRESS: Plant Kraft Port Wentworth

SEND REPORT TO: in comments

INVOICE TO: GPC Environmental Affairs (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers

Turnaround Time Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: ☐ I ☐ II ☐ III ☐ IV

L INSTRUCTIONS/COMMENTS: Report to:
stephen.wilson
trent.godwin
forrest.howard
Lee.millet
Mick.Hyman

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

☐ CLIENT ☒ FedEx ☐ UPS ☐ MAIL ☐ COURIER

☐ GREYHOUND ☐ OTHER

ES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED WITH STANDARD TAT.

ES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

X CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) WW=Wastewater DW=Drinking Water O = Other (specify)

VATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 12-Jun-17

Client:	Georgia Power Company	**Client Sample ID:**	SBCS-01
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/8/2017 11:50:00 AM
Lab ID:	1706866-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Antimony	0.28	0.21		mg/Kg-dry	243902	1	06/09/2017 19:21	JR
Arsenic	BRL	6.34		mg/Kg-dry	243902	1	06/09/2017 19:21	JR
Nickel	9.27	0.21		mg/Kg-dry	243902	1	06/09/2017 19:21	JR
Thallium	BRL	0.04		mg/Kg-dry	243902	1	06/09/2017 19:21	JR
PERCENT MOISTURE D2216								
Percent Moisture	5.81	0		wt%	R345162	1	06/12/2017 09:00	JC

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 12-Jun-17

Client:	Georgia Power Company	**Client Sample ID:**	SBCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	6/8/2017 11:52:00 AM
Lab ID:	1706866-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Antimony	BRL	0.19		mg/Kg-dry	243902	1	06/09/2017 19:28	JR
Arsenic	BRL	5.67		mg/Kg-dry	243902	1	06/09/2017 19:28	JR
Nickel	6.11	0.19		mg/Kg-dry	243902	1	06/09/2017 19:28	JR
Thallium	BRL	0.04		mg/Kg-dry	243902	1	06/09/2017 19:28	JR
PERCENT MOISTURE D2216								
Percent Moisture	2.38	0		wt%	R345162	1	06/12/2017 09:00	JC

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1706866

ANALYTICAL QC SUMMARY REPORT

BatchID: 243902

Sample ID: **MB-243902** Client ID: Units: **ug/Kg** Prep Date: **06/09/2017** Run No: **345116**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **243902** Analysis Date: **06/09/2017** Seq No: **7574168**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	250									
Arsenic	BRL	7500									
Nickel	BRL	250									
Thallium	BRL	50.0									

Sample ID: **LCS-243902** Client ID: Units: **ug/Kg** Prep Date: **06/09/2017** Run No: **345116**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **243902** Analysis Date: **06/09/2017** Seq No: **7574074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	4810	250	5000		96.2	80	120				
Arsenic	4532	4500	5000		90.6	80	120				
Nickel	4889	250	5000		97.8	80	120				
Thallium	4856	50.0	5000		97.1	80	120				

Sample ID: **1706865-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **06/09/2017** Run No: **345116**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **243902** Analysis Date: **06/09/2017** Seq No: **7574077**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	3.709	0.29	5.838	0.1611	60.8	75	125				S
Arsenic	12.32	8.76	5.838	4.915	127	75	125				S
Nickel	18.22	0.29	5.838	5.923	211	75	125				S
Thallium	5.621	0.06	5.838	0.1614	93.5	75	125				

Sample ID: **1706865-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **06/09/2017** Run No: **345116**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **243902** Analysis Date: **06/09/2017** Seq No: **7574078**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	3.212	0.26	5.149	0.1611	59.3	75	125	3.709	14.4	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1706866

ANALYTICAL QC SUMMARY REPORT

BatchID: 243902

Sample ID: **1706865-001AMSD** Client ID:
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B**
Units: **mg/Kg-dry** Prep Date: **06/09/2017** Run No: **345116**
BatchID: **243902** Analysis Date: **06/09/2017** Seq No: **7574078**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	11.04	7.72	5.149	4.915	119	75	125	12.32	11.0	20	
Nickel	13.80	0.26	5.149	5.923	153	75	125	18.22	27.6	20	SR
Thallium	5.006	0.05	5.149	0.1614	94.1	75	125	5.621	11.6	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

April 28, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1704M66

Analytical Environmental Services, Inc. received 3 samples on 4/27/2017 10:35:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1704M66

Date: 4/26/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308
PHONE: 770-296-9648
EMAIL: forrest.howard@Reddenv.com
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED: EPA 6020 As, Ba, Be

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	APCS-12	4/26/17	1415	X		SO	I: X		
2	APCS-13	4/26/17	1420	X		SO	I: X		
3	APCS-14	4/26/17	1425	X		SO	I: X		
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	4/26/17 1700	1. To Fedex	
2.		2. Miriam Lamar	4/27/17 10:35AM
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Willson
Lea Millet
Nick Hyman
Forrest Howard

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Port Wentworth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ☐ II ☐ III ☐ IV ☐

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 28-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-12
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/26/2017 2:15:00 PM
Lab ID:	1704M66-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.61		mg/Kg-dry	241739	5	04/28/2017 16:25	JR
Barium	14.0	2.54		mg/Kg-dry	241739	5	04/28/2017 16:25	JR
Beryllium	0.20	0.05		mg/Kg-dry	241739	5	04/28/2017 16:25	JR
PERCENT MOISTURE D2216								
Percent Moisture	8.11	0		wt%	R341768	1	04/28/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-13
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/26/2017 2:20:00 PM
Lab ID:	1704M66-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.33		mg/Kg-dry	241739	5	04/28/2017 16:51	JR
Barium	9.58	2.78		mg/Kg-dry	241739	5	04/28/2017 16:51	JR
Beryllium	BRL	0.06		mg/Kg-dry	241739	5	04/28/2017 16:51	JR
PERCENT MOISTURE D2216								
Percent Moisture	16.0	0		wt%	R341768	1	04/28/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-14
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/26/2017 2:25:00 PM
Lab ID:	1704M66-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.70		mg/Kg-dry	241739	5	04/28/2017 16:57	JR
Barium	13.1	2.57		mg/Kg-dry	241739	5	04/28/2017 16:57	JR
Beryllium	BRL	0.05		mg/Kg-dry	241739	5	04/28/2017 16:57	JR
PERCENT MOISTURE D2216								
Percent Moisture	3.95	0		wt%	R341768	1	04/28/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

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ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1704M66

ANALYTICAL QC SUMMARY REPORT

BatchID: 241739

Sample ID: **MB-241739** Client ID: Units: **ug/Kg** Prep Date: **04/27/2017** Run No: **341712**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241739** Analysis Date: **04/27/2017** Seq No: **7483720**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									

Sample ID: **MB-241739** Client ID: Units: **ug/Kg** Prep Date: **04/27/2017** Run No: **341712**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241739** Analysis Date: **04/28/2017** Seq No: **7486447**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	BRL	500									
Beryllium	BRL	50.0									

Sample ID: **LCS-241739** Client ID: Units: **ug/Kg** Prep Date: **04/27/2017** Run No: **341712**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241739** Analysis Date: **04/27/2017** Seq No: **7483721**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500	5000		94.9	80	120				

Sample ID: **LCS-241739** Client ID: Units: **ug/Kg** Prep Date: **04/27/2017** Run No: **341712**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241739** Analysis Date: **04/28/2017** Seq No: **7486448**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	4781	500	5000		95.6	80	120				
Beryllium	4109	50.0	5000		82.2	80	120				

Sample ID: **1704M65-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **04/27/2017** Run No: **341712**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241739** Analysis Date: **04/27/2017** Seq No: **7483723**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	13850	7990	5324	8943	92.1	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1704M66

ANALYTICAL QC SUMMARY REPORT

BatchID: 241739

Sample ID: **1704M65-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **04/27/2017** Run No: **341712**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241739** Analysis Date: **04/28/2017** Seq No: **7486450**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	152800	2660	5324	135200	331	75	125				S
Beryllium	7967	266	5324	1002	131	75	125				S

Sample ID: **1704M65-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **04/27/2017** Run No: **341712**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241739** Analysis Date: **04/27/2017** Seq No: **7483724**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	14190	7990	5325	8943	98.5	75	125	13850	2.41	20	

Sample ID: **1704M65-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **04/27/2017** Run No: **341712**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241739** Analysis Date: **04/28/2017** Seq No: **7486451**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	150200	2660	5325	135200	282	75	125	152800	1.71	20	S
Beryllium	7645	266	5325	1002	125	75	125	7967	4.13	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

May 03, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1704O50

Analytical Environmental Services, Inc. received 3 samples on 4/28/2017 12:35:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1704052

Date: 4/27/17 Page 1 of 1

COMPANY: Georgia Power Company

ADDRESS: 241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308

PHONE: 770-296-9648

EMAIL: Forrest.Howard@Resolutenv.com

SAMPLED BY: Forrest Howard

SIGNATURE:

ANALYSIS REQUESTED

PRESERVATION (see codes)

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	Arsenic (EPA6020)	Barium, Boron	I	REMARKS	Number of Containers
1	APCS-15	4/27/17	1140	X		SO	X				1
2	APCS-16	4/27/17	1145	X		SO	X				1
3	APCS-17	4/27/17	1150	X		SO	X				1
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.		1.	4/28/17 1235
2.	4/28/17 1235	2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
stephen Wilson
Lea Millet
Forrest Howard
Nick Hyman

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Portwentworth GA
SEND REPORT TO: in comments
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental Affairs
Hand Delivered
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush **(auth req.)**
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ☐ II ☐ III ☐ IV ☐

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 3-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-15
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/27/2017 11:40:00 AM
Lab ID:	1704O50-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.94		mg/Kg-dry	241842	5	05/01/2017 17:16	JR
Barium	11.3	0.53		mg/Kg-dry	241842	5	05/01/2017 17:16	JR
Beryllium	0.33	0.05		mg/Kg-dry	241842	5	05/01/2017 17:16	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.6	0		wt%	R341910	1	05/01/2017 07:30	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-16
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/27/2017 11:45:00 AM
Lab ID:	1704O50-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.71		mg/Kg-dry	241842	5	05/01/2017 16:38	JR
Barium	7.63	0.51		mg/Kg-dry	241842	5	05/01/2017 16:38	JR
Beryllium	BRL	0.05		mg/Kg-dry	241842	5	05/01/2017 16:38	JR
PERCENT MOISTURE D2216								
Percent Moisture	11.5	0		wt%	R341910	1	05/01/2017 07:30	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-17
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/27/2017 11:50:00 AM
Lab ID:	1704O50-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.59		mg/Kg-dry	241842	5	05/01/2017 17:22	JR
Barium	11.8	0.51		mg/Kg-dry	241842	5	05/01/2017 17:22	JR
Beryllium	BRL	0.05		mg/Kg-dry	241842	5	05/01/2017 17:22	JR
PERCENT MOISTURE D2216								
Percent Moisture	6.70	0		wt%	R341910	1	05/01/2017 07:30	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1704O50

ANALYTICAL QC SUMMARY REPORT

BatchID: 241842

Sample ID: **MB-241842** Client ID: Units: **ug/Kg** Prep Date: **05/01/2017** Run No: **341934**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241842** Analysis Date: **05/01/2017** Seq No: **7489717**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									
Beryllium	BRL	50.0									

Sample ID: **LCS-241842** Client ID: Units: **ug/Kg** Prep Date: **05/01/2017** Run No: **341934**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241842** Analysis Date: **05/01/2017** Seq No: **7489723**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5033	1500	5000		101	80	120				
Barium	4609	500	5000		92.2	80	120				
Beryllium	4722	50.0	5000		94.4	80	120				

Sample ID: **1704O50-002AMS** Client ID: **APCS-16** Units: **mg/Kg-dry** Prep Date: **05/01/2017** Run No: **341934**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241842** Analysis Date: **05/01/2017** Seq No: **7489719**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7.054	5.17	5.175	1.740	103	75	125				
Barium	16.16	0.52	5.175	7.629	165	75	125				S
Beryllium	5.543	0.05	5.175		107	75	125				

Sample ID: **1704O50-002AMSD** Client ID: **APCS-16** Units: **mg/Kg-dry** Prep Date: **05/01/2017** Run No: **341934**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241842** Analysis Date: **05/01/2017** Seq No: **7489720**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.187	7.76	5.173	1.740	125	75	125	7.054	14.9	20	
Barium	14.23	0.52	5.173	7.629	128	75	125	16.16	12.7	20	S
Beryllium	5.798	0.05	5.173		112	75	125	5.543	4.49	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

April 13, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1704918

Analytical Environmental Services, Inc. received 9 samples on 4/12/2017 7:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1704918

Date: 4/11/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE B 10185 Atlanta, GA 30308
PHONE: 770-296-9648
EMAIL: forrest.howard@Resolutenv.com
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	EPA 6020 Arsenic Barium Beryllium	EPA 8015 TPH-DRO											REMARKS	Number of Containers
							PRESERVATION (see codes) I	I												
1	APCS-06	4/10/17	1610	X		SO	X													
2	APCS-07	4/10/17	1615	X		SO	X													
3	APCS-08	4/11/17	0920	X		SO	X													
4	APCS-09	4/11/17	0925	X		SO	X													
5	ASTCS-17	4/11/17	1020	X		SO	X	X												
6	ASTCS-18	4/11/17	1025	X		SO	X	X												
7	APCS-10	4/11/17	1525	X		SO	X													
8	ASTCS-19	4/11/17	1535	X		SO	X	X												
9	ASTCS-20	4/11/17	1540	X		SO	X	X												
10																				
11																				
12																				
13																				
14																				

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	4/11/17 1700	1. Fedex	
2.		2. Tamyra Stiles	4/12/17 730
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to ~~Forrest~~ FH
stephen.wilson@Resolutenv.com
LLmillet@southernco.com
forrest.howard@Resolutenv.com

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Port Wentworth GA
SEND REPORT TO: see comments
INVOICE TO: GA Power Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ☐ II ☐ III ☐ IV ☐

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 13-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-06
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/10/2017 4:10:00 PM
Lab ID:	1704918-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.34		mg/Kg-dry	240900	1	04/12/2017 19:43	JS
Barium	22.3	0.42		mg/Kg-dry	240900	1	04/12/2017 19:43	JS
Beryllium	0.08	0.04		mg/Kg-dry	240900	1	04/12/2017 19:43	JS
PERCENT MOISTURE D2216								
Percent Moisture	12.8	0		wt%	R340583	1	04/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-07
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/10/2017 4:15:00 PM
Lab ID:	1704918-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.91		mg/Kg-dry	240900	1	04/12/2017 19:49	JS
Barium	9.76	0.46		mg/Kg-dry	240900	1	04/12/2017 19:49	JS
Beryllium	0.05	0.05		mg/Kg-dry	240900	1	04/12/2017 19:49	JS
PERCENT MOISTURE D2216								
Percent Moisture	11.1	0		wt%	R340583	1	04/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-08
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/11/2017 9:20:00 AM
Lab ID:	1704918-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.49		mg/Kg-dry	240900	1	04/12/2017 19:55	JS
Barium	4.07	0.50		mg/Kg-dry	240900	1	04/12/2017 19:55	JS
Beryllium	BRL	0.05		mg/Kg-dry	240900	1	04/12/2017 19:55	JS
PERCENT MOISTURE D2216								
Percent Moisture	20.3	0		wt%	R340583	1	04/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-09
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/11/2017 9:25:00 AM
Lab ID:	1704918-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.05		mg/Kg-dry	240900	1	04/12/2017 20:02	JS
Barium	28.2	0.54		mg/Kg-dry	240900	1	04/12/2017 20:02	JS
Beryllium	0.11	0.05		mg/Kg-dry	240900	1	04/12/2017 20:02	JS
PERCENT MOISTURE D2216								
Percent Moisture	25.9	0		wt%	R340583	1	04/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-17
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/11/2017 10:20:00 AM
Lab ID:	1704918-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	8.20	7.56		mg/Kg-dry	240900	1	04/12/2017 20:08	JS
Barium	23.1	0.50		mg/Kg-dry	240900	1	04/12/2017 20:08	JS
Beryllium	0.29	0.05		mg/Kg-dry	240900	1	04/12/2017 20:08	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.6		mg/Kg-dry	240907	1	04/12/2017 17:01	RF
Surr: Dioctylphthalate	77.7	54.5-121		%REC	240907	1	04/12/2017 17:01	RF
PERCENT MOISTURE D2216								
Percent Moisture	22.2	0		wt%	R340583	1	04/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-18
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/11/2017 10:25:00 AM
Lab ID:	1704918-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.98		mg/Kg-dry	240900	1	04/12/2017 20:14	JS
Barium	30.1	0.47		mg/Kg-dry	240900	1	04/12/2017 20:14	JS
Beryllium	0.26	0.05		mg/Kg-dry	240900	1	04/12/2017 20:14	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.4		mg/Kg-dry	240907	1	04/12/2017 17:24	RF
Surr: Dioctylphthalate	80.2	54.5-121		%REC	240907	1	04/12/2017 17:24	RF
PERCENT MOISTURE D2216								
Percent Moisture	20.6	0		wt%	R340583	1	04/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-10
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/11/2017 3:25:00 PM
Lab ID:	1704918-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.44		mg/Kg-dry	240900	1	04/12/2017 20:20	JS
Barium	17.7	0.56		mg/Kg-dry	240900	1	04/12/2017 20:20	JS
Beryllium	0.07	0.06		mg/Kg-dry	240900	1	04/12/2017 20:20	JS
PERCENT MOISTURE D2216								
Percent Moisture	12.3	0		wt%	R340583	1	04/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-19
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/11/2017 3:35:00 PM
Lab ID:	1704918-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.97		mg/Kg-dry	240900	1	04/12/2017 20:26	JS
Barium	20.3	0.53		mg/Kg-dry	240900	1	04/12/2017 20:26	JS
Beryllium	0.12	0.05		mg/Kg-dry	240900	1	04/12/2017 20:26	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.6		mg/Kg-dry	240907	1	04/12/2017 17:47	RF
Surr: Dioctylphthalate	81.6	54.5-121		%REC	240907	1	04/12/2017 17:47	RF
PERCENT MOISTURE D2216								
Percent Moisture	12.2	0		wt%	R340583	1	04/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-20
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/11/2017 3:40:00 PM
Lab ID:	1704918-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.20		mg/Kg-dry	240900	1	04/12/2017 20:33	JS
Barium	85.4	0.48		mg/Kg-dry	240900	1	04/12/2017 20:33	JS
Beryllium	0.15	0.05		mg/Kg-dry	240900	1	04/12/2017 20:33	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.1		mg/Kg-dry	240907	1	04/12/2017 18:09	RF
Surr: Dioctylphthalate	84.6	54.5-121		%REC	240907	1	04/12/2017 18:09	RF
PERCENT MOISTURE D2216								
Percent Moisture	17.8	0		wt%	R340583	1	04/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1704918

ANALYTICAL QC SUMMARY REPORT

BatchID: 240900

Sample ID: **MB-240900** Client ID: Units: **ug/Kg** Prep Date: **04/12/2017** Run No: **340568**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240900** Analysis Date: **04/12/2017** Seq No: **7453501**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									
Beryllium	BRL	50.0									

Sample ID: **LCS-240900** Client ID: Units: **ug/Kg** Prep Date: **04/12/2017** Run No: **340568**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240900** Analysis Date: **04/12/2017** Seq No: **7453502**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4317	1000	5000	199.8	82.3	80	120				
Barium	4922	500	5000		98.4	80	120				
Beryllium	4549	50.0	5000		91.0	80	120				

Sample ID: **1704917-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **04/12/2017** Run No: **340568**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240900** Analysis Date: **04/12/2017** Seq No: **7453504**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7694	7690	5492	2373	96.9	75	125				
Barium	40420	549	5492	33980	117	75	125				
Beryllium	5429	54.9	5492	196.2	95.3	75	125				

Sample ID: **1704917-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **04/12/2017** Run No: **340568**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240900** Analysis Date: **04/12/2017** Seq No: **7453505**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7405	7320	5230	2373	96.2	75	125	7694	3.83	20	
Barium	40670	523	5230	33980	128	75	125	40420	0.603	20	S
Beryllium	5298	52.3	5230	196.2	97.5	75	125	5429	2.45	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1704918

ANALYTICAL QC SUMMARY REPORT

BatchID: 240907

Sample ID: **MB-240907**	Client ID:				Units: **mg/Kg**		Prep Date: **04/12/2017**		Run No: **340563**	
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240907**		Analysis Date: **04/12/2017**		Seq No: **7453229**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.743	0	3.300		83.1	54.5	121				

Sample ID: **LCS-240907**	Client ID:				Units: **mg/Kg**		Prep Date: **04/12/2017**		Run No: **340563**	
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240907**		Analysis Date: **04/12/2017**		Seq No: **7453407**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	23.91	6.7	33.30		71.8	54.6	120				
Surr: Dioctylphthalate	2.752	0	3.330		82.6	54.5	121				

Sample ID: **1704784-002CMS**	Client ID:				Units: **mg/Kg**		Prep Date: **04/12/2017**		Run No: **340563**	
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240907**		Analysis Date: **04/12/2017**		Seq No: **7454711**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	84.01	6.7	33.30	90.34	-19.0	40.6	122				S
Surr: Dioctylphthalate	2.806	0	3.330		84.3	54.5	121				

Sample ID: **1704784-002CMSD**	Client ID:				Units: **mg/Kg**		Prep Date: **04/12/2017**		Run No: **340563**	
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240907**		Analysis Date: **04/12/2017**		Seq No: **7454712**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	93.66	6.7	33.30	90.34	9.98	40.6	122	84.01	10.9	29.9	S
Surr: Dioctylphthalate	3.100	0	3.330		93.1	54.5	121	2.806	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

May 04, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1705229

Analytical Environmental Services, Inc. received 4 samples on May 3, 2017 10:10 am for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1705229

Date: 5/2/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
PHONE: 770-296-9648	EMAIL: Forrest.howard@Resolute-ENV.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 As,Ba,Be	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	APCS-18	5/2/17	1425	X		SO	X	X		
2	APCS-19	5/2/17	1430	X		SO	X	X		
3	EAPCS-01	5/2/17	1545	X		SO	X	X		
4	EAPCS-02	5/2/17	1550	X		SO	X	X		
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	5/2/17 1700	1. To Fedex	
2.		2.	5/3/17 10:10
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Port Wentworth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
sent on AES Fedex account
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ☐ II ☐ III ☐ IV ☐

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 4-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-18
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/2/2017 2:25:00 PM
Lab ID:	1705229-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.80		mg/Kg-dry	241933	5	05/03/2017 18:25	JR
Barium	72.4	2.93		mg/Kg-dry	241933	5	05/03/2017 18:25	JR
Beryllium	0.63	0.29		mg/Kg-dry	241933	5	05/03/2017 18:25	JR
PERCENT MOISTURE D2216								
Percent Moisture	29.3	0		wt%	R342244	1	05/04/2017 07:30	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-19
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/2/2017 2:30:00 PM
Lab ID:	1705229-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	8.51	7.36		mg/Kg-dry	241933	5	05/03/2017 18:31	JR
Barium	730	2.45		mg/Kg-dry	241933	5	05/03/2017 18:31	JR
Beryllium	0.82	0.24		mg/Kg-dry	241933	5	05/03/2017 18:31	JR
PERCENT MOISTURE D2216								
Percent Moisture	28.8	0		wt%	R342244	1	05/04/2017 07:30	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-May-17

Client:	Georgia Power Company	**Client Sample ID:**	EAPCS-01
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/2/2017 3:45:00 PM
Lab ID:	1705229-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.44		mg/Kg-dry	241933	5	05/03/2017 18:37	JR
Barium	32.9	1.81		mg/Kg-dry	241933	5	05/03/2017 18:37	JR
Beryllium	0.19	0.18		mg/Kg-dry	241933	5	05/03/2017 18:37	JR
PERCENT MOISTURE D2216								
Percent Moisture	19.3	0		wt%	R342244	1	05/04/2017 07:30	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-May-17

Client:	Georgia Power Company	**Client Sample ID:**	EAPCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/2/2017 3:50:00 PM
Lab ID:	1705229-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.51		mg/Kg-dry	241933	5	05/03/2017 18:43	JR
Barium	13.7	1.84		mg/Kg-dry	241933	5	05/03/2017 18:43	JR
Beryllium	BRL	0.04		mg/Kg-dry	241933	5	05/03/2017 18:43	JR
PERCENT MOISTURE D2216								
Percent Moisture	19.0	0		wt%	R342244	1	05/04/2017 07:30	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

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AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1705229

ANALYTICAL QC SUMMARY REPORT

BatchID: 241933

Sample ID: **MB-241933** Client ID: Units: **ug/Kg** Prep Date: **05/02/2017** Run No: **342046**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241933** Analysis Date: **05/02/2017** Seq No: **7492483**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									
Beryllium	BRL	50.0									

Sample ID: **LCS-241933** Client ID: Units: **ug/Kg** Prep Date: **05/02/2017** Run No: **342046**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241933** Analysis Date: **05/02/2017** Seq No: **7492484**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4375	1500	5000	75.50	86.0	80	120				
Barium	5160	500	5000	431.3	94.6	80	120				
Beryllium	5585	50.0	5000		112	80	120				

Sample ID: **1705080-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **05/02/2017** Run No: **342046**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241933** Analysis Date: **05/02/2017** Seq No: **7492486**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	19320	6830	4556	13950	118	75	125				
Barium	216100	2280	4556	202700	295	75	125				S
Beryllium	6693	228	4556	1319	118	75	125				

Sample ID: **1705080-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **05/02/2017** Run No: **342046**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241933** Analysis Date: **05/02/2017** Seq No: **7492487**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	17230	6840	4561	13950	71.9	75	125	19320	11.4	20	S
Barium	197700	2280	4561	202700	-108	75	125	216100	8.89	20	S
Beryllium	6668	228	4561	1319	117	75	125	6693	0.380	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

May 05, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1705355

Analytical Environmental Services, Inc. received 8 samples on 5/4/2017 10:10:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1705355

Date: 5/3/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE BIN 10065 Atlanta, GA 30308
PHONE: 770-296-9648
EMAIL: forrest.howard@Resolutenv.com
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED: 40 CFR 60 App A, Method 29 (Hg)

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	APCS-20	5/3/17	1030	X		SO	X		1
2	APCS-21	5/3/17	1035	X		SO	X		1
3	APCS-22	5/3/17	1518	X		SO	X		1
4	APCS-23	5/3/17	1525	X		SO	X		1
5	EAPCS-03	5/3/17	1050	X		SO	X		1
6	EAPCS-04	5/3/17	1350	X		SO	X		1
7	EAPCS-05	5/3/17	1355	X		SO	X		1
8	EAPCS-06	5/3/17	1400	X		SO	X		1
9									
10									
11									
12									
13									
14									

RELINQUISHED BY: DATE/TIME:
1. 5/3/17 1700
2.
3.

RECEIVED BY: DATE/TIME:
1. Fedex
2. Tampa Bellas 5/4/17 1010
3.

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Forrest Howard
Stephen Willson
Lea Millet
Nick Hyman

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Port Wentworth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
sent w/ AES fedex account
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ☐ II ☐ III ☐ IV ☐

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 5-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-20
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/3/2017 10:30:00 AM
Lab ID:	1705355-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.28		mg/Kg-dry	241300	1	05/04/2017 20:26	JS
Barium	24.1	0.35		mg/Kg-dry	241300	1	05/04/2017 20:26	JS
Beryllium	0.09	0.04		mg/Kg-dry	241300	1	05/04/2017 20:26	JS
PERCENT MOISTURE D2216								
Percent Moisture	17.7	0		wt%	R342356	1	05/05/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-21
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/3/2017 10:35:00 AM
Lab ID:	1705355-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	9.38	7.91		mg/Kg-dry	241300	1	05/04/2017 20:32	JS
Barium	48.8	0.53		mg/Kg-dry	241300	1	05/04/2017 20:32	JS
Beryllium	0.26	0.05		mg/Kg-dry	241300	1	05/04/2017 20:32	JS
PERCENT MOISTURE D2216								
Percent Moisture	21.3	0		wt%	R342356	1	05/05/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-22
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/3/2017 3:18:00 PM
Lab ID:	1705355-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.04		mg/Kg-dry	241300	1	05/04/2017 20:38	JS
Barium	6.99	0.40		mg/Kg-dry	241300	1	05/04/2017 20:38	JS
Beryllium	0.05	0.04		mg/Kg-dry	241300	1	05/04/2017 20:38	JS
PERCENT MOISTURE D2216								
Percent Moisture	13.9	0		wt%	R342356	1	05/05/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-23
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/3/2017 3:25:00 PM
Lab ID:	1705355-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	17.0	8.18		mg/Kg-dry	241300	1	05/04/2017 20:45	JS
Barium	53.3	0.55		mg/Kg-dry	241300	1	05/04/2017 20:45	JS
Beryllium	0.36	0.05		mg/Kg-dry	241300	1	05/04/2017 20:45	JS
PERCENT MOISTURE D2216								
Percent Moisture	11.0	0		wt%	R342356	1	05/05/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-May-17

Client:	Georgia Power Company	**Client Sample ID:**	EAPCS-03
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/3/2017 10:50:00 AM
Lab ID:	1705355-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.39		mg/Kg-dry	241300	1	05/04/2017 20:51	JS
Barium	25.4	0.49		mg/Kg-dry	241300	1	05/04/2017 20:51	JS
Beryllium	0.18	0.05		mg/Kg-dry	241300	1	05/04/2017 20:51	JS
PERCENT MOISTURE D2216								
Percent Moisture	6.14	0		wt%	R342356	1	05/05/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-May-17

Client:	Georgia Power Company	**Client Sample ID:**	EAPCS-04
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/3/2017 1:50:00 PM
Lab ID:	1705355-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.75		mg/Kg-dry	241300	1	05/04/2017 20:57	JS
Barium	55.2	0.45		mg/Kg-dry	241300	1	05/04/2017 20:57	JS
Beryllium	0.11	0.04		mg/Kg-dry	241300	1	05/04/2017 20:57	JS
PERCENT MOISTURE D2216								
Percent Moisture	8.51	0		wt%	R342356	1	05/05/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-May-17

Client:	Georgia Power Company	**Client Sample ID:**	EAPCS-05
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/3/2017 1:55:00 PM
Lab ID:	1705355-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.96		mg/Kg-dry	241300	1	05/04/2017 21:03	JS
Barium	75.1	0.40		mg/Kg-dry	241300	1	05/04/2017 21:03	JS
Beryllium	0.12	0.04		mg/Kg-dry	241300	1	05/04/2017 21:03	JS
PERCENT MOISTURE D2216								
Percent Moisture	11.4	0		wt%	R342356	1	05/05/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-May-17

Client:	Georgia Power Company	**Client Sample ID:**	EAPCS-06
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/3/2017 2:00:00 PM
Lab ID:	1705355-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.93		mg/Kg-dry	241300	1	05/04/2017 21:09	JS
Barium	69.8	0.53		mg/Kg-dry	241300	1	05/04/2017 21:09	JS
Beryllium	0.10	0.05		mg/Kg-dry	241300	1	05/04/2017 21:09	JS
PERCENT MOISTURE D2216								
Percent Moisture	8.35	0		wt%	R342356	1	05/05/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1705355

ANALYTICAL QC SUMMARY REPORT

BatchID: 241300

Sample ID: **MB-241300** Client ID: Units: **ug/Kg** Prep Date: **05/04/2017** Run No: **342266**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241300** Analysis Date: **05/04/2017** Seq No: **7498339**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									
Beryllium	BRL	50.0									

Sample ID: **LCS-241300** Client ID: Units: **ug/Kg** Prep Date: **05/04/2017** Run No: **342266**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241300** Analysis Date: **05/04/2017** Seq No: **7498340**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4294	1500	5000	113.6	83.6	80	120				
Barium	5010	500	5000		100	80	120				
Beryllium	5035	50.0	5000		101	80	120				

Sample ID: **1705354-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **05/04/2017** Run No: **342266**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241300** Analysis Date: **05/04/2017** Seq No: **7498343**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	10.19	5.83	3.885	8.170	51.9	75	125				S
Barium	146.3	1.94	3.885	141.6	122	75	125				
Beryllium	5.206	0.19	3.885	0.8569	112	75	125				

Sample ID: **1705354-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **05/04/2017** Run No: **342266**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **241300** Analysis Date: **05/04/2017** Seq No: **7498344**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	12.14	5.81	3.875	8.170	102	75	125	12.14	0	20	
Barium	142.4	1.94	3.875	141.6	19.8	75	125	142.4	0	20	S
Beryllium	5.154	0.19	3.875	0.8569	111	75	125	5.154	0	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1705A42

Date: 5/10/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308
PHONE: 770-286-9648	FAX: Forrest.howard@Resolutionva.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	EPA 6020 HSRA metals	EPA 6020 As, Ba, Be	No # of Containers	REMARKS
	PRESERVATION (See codes)						I	I		
1	MR-01	5/10/17	1015		X	SO	X			
2	EAPCS-14	5/10/17	1350	X		SO		X		
3	EA PCS-15	5/10/17	1355	X		SO		X		
4	~~(H) APCS-04~~ APCS-19A	5/10/17	1510	X		SO		X		
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1:	5/10/17 1730	1: To FedEx	
2:		2: Alex Lodge	5/11/17
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Port Wentworth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
sent w/ AES FedEx account
QUOTE #: PO#:

RECEIPT

Total # of Containers

Turnaround Time Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):
E-mail? Fax?
DATA PACKAGE: I ○ II ○ III ○ IV ○

SPECIAL INSTRUCTIONS/COMMENTS: Report to: Stephen Wilson, Forrest Howard, Lee Millet, Nicki Hyman (HSRA Metals Attached)

SHIPMENT METHOD:
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 15-May-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-19A
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/10/2017 3:10:00 PM
Lab ID:	1705A42-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.66		mg/Kg-dry	242467	5	05/12/2017 14:38	JR
Barium	40.3	0.58		mg/Kg-dry	242467	5	05/12/2017 14:38	JR
Beryllium	0.99	0.06		mg/Kg-dry	242467	5	05/12/2017 14:38	JR
PERCENT MOISTURE D2216								
Percent Moisture	28.1	0		wt%	R342962	1	05/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 29, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1703P02

Analytical Environmental Services, Inc. received 9 samples on 3/29/2017 7:50:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive Atlanta GA 30340- 3906
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708P02

Date: 3/28/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd B10185 Atlanta, GA 30308
PHONE: 770-296-9648	FAX:
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	EPA6020 Arsenic Barium Beryllium	EPA8270C TPH-DRO	PRESERVATION (See codes) H	PRESERVATION (See codes) I	REMARKS	No # of Containers
1	APCS-01	3/28/17	1406	X		SO	X		X			
2	APCS-02	3/28/17	1402	X		SO	X		X			
3	APCS-03	3/28/17	1404	X		SO	X		X			
4	APCS-04	3/28/17	1408	X		SO	X		X			
5	ASTCS-01	3/28/17	1430	X		SO	X	X	X			
6	ASTCS-02	3/28/17	1432	X		SO	X	X	X			
7	ASTCS-03	3/28/17	1434	X		SO	X	X	X			
8	ASTCS-04	3/28/17	1436	X		SO	X	X	X			
9	ASTCS-05	3/28/17	1438	X		SO	X	X	X			
10												
11												
12												
13												
14												

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	3/28/17 1717	1: Relinquished to fedex	
2:		2: Tamja Bellue	3/29/17 750
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen.wilson@Resolute-enk.com
LLmillet@Southernco.com
forrest.howard@Resolute-enk.com

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
☐ CLIENT ☐ FedEx ☐ UPS ☐ MAIL ☐ COURIER
☐ GREYHOUND ☐ OTHER_____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, portwentworth GA
SEND REPORT TO: in comments
INVOICE TO: GA Power Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers

Turnaround Time Request
☐ Standard 5 Business Days
☐ 2 Business Day Rush
☐ Next Business Day Rush
☒ Same Day Rush (auth req.)
☐ Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: ☐ I ☐ II ☐ III ☐ IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED WITH STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) WW=Wastewater DW=Drinking Water O = Other (specify)
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1703P02

Case Narrative

Metals Analysis by Method 6020B:

Due to sample matrix, samples 1703P02-001C, 002C, 003C required dilution during analysis resulting in elevated reporting limits for Beryllium.

Analytical Environmental Services, Inc **Date:** 30-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-01
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/28/2017 2:00:00 PM
Lab ID:	1703P02-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.19		mg/Kg-dry	240148	5	03/29/2017 16:19	JS
Barium	7.28	2.40		mg/Kg-dry	240148	5	03/29/2017 16:19	JS
Beryllium	BRL	0.12		mg/Kg-dry	240148	5	03/29/2017 16:19	JS
PERCENT MOISTURE D2216								
Percent Moisture	6.39	0		wt%	R339563	1	03/29/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 30-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/28/2017 2:02:00 PM
Lab ID:	1703P02-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.13		mg/Kg-dry	240148	5	03/29/2017 16:25	JS
Barium	10.9	2.04		mg/Kg-dry	240148	5	03/29/2017 16:25	JS
Beryllium	BRL	0.10		mg/Kg-dry	240148	5	03/29/2017 16:25	JS
PERCENT MOISTURE D2216								
Percent Moisture	5.66	0		wt%	R339563	1	03/29/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 30-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-03
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/28/2017 2:04:00 PM
Lab ID:	1703P02-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.65		mg/Kg-dry	240148	5	03/29/2017 16:31	JS
Barium	15.4	1.88		mg/Kg-dry	240148	5	03/29/2017 16:31	JS
Beryllium	BRL	0.09		mg/Kg-dry	240148	5	03/29/2017 16:31	JS
PERCENT MOISTURE D2216								
Percent Moisture	10.1	0		wt%	R339563	1	03/29/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 30-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-04
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/28/2017 2:08:00 PM
Lab ID:	1703P02-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.51		mg/Kg-dry	240148	5	03/29/2017 17:11	JS
Barium	45.2	2.17		mg/Kg-dry	240148	5	03/29/2017 17:11	JS
Beryllium	0.19	0.11		mg/Kg-dry	240148	5	03/29/2017 18:03	JS
PERCENT MOISTURE D2216								
Percent Moisture	15.4	0		wt%	R339563	1	03/29/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 30-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-01
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/28/2017 2:30:00 PM
Lab ID:	1703P02-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.87		mg/Kg-dry	240148	5	03/29/2017 17:17	JS
Barium	50.3	1.96		mg/Kg-dry	240148	5	03/29/2017 17:17	JS
Beryllium	0.19	0.10		mg/Kg-dry	240148	5	03/29/2017 17:17	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.5		mg/Kg-dry	240119	1	03/29/2017 11:40	RF
Surr: Dioctylphthalate	80.3	54.5-121		%REC	240119	1	03/29/2017 11:40	RF
PERCENT MOISTURE D2216								
Percent Moisture	11.0	0		wt%	R339563	1	03/29/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 30-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/28/2017 2:32:00 PM
Lab ID:	1703P02-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.71		mg/Kg-dry	240148	5	03/29/2017 17:24	JS
Barium	27.3	2.57		mg/Kg-dry	240148	5	03/29/2017 17:24	JS
Beryllium	0.27	0.13		mg/Kg-dry	240148	5	03/29/2017 17:24	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	44	8.1		mg/Kg-dry	240119	1	03/29/2017 13:12	RF
Surr: Dioctylphthalate	94.5	54.5-121		%REC	240119	1	03/29/2017 13:12	RF
PERCENT MOISTURE D2216								
Percent Moisture	17.4	0		wt%	R339563	1	03/29/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 30-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-03
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/28/2017 2:34:00 PM
Lab ID:	1703P02-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	11.6	6.07		mg/Kg-dry	240148	5	03/29/2017 17:30	JS
Barium	38.8	2.02		mg/Kg-dry	240148	5	03/29/2017 17:30	JS
Beryllium	0.25	0.10		mg/Kg-dry	240148	5	03/29/2017 17:30	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.9		mg/Kg-dry	240119	1	03/29/2017 12:03	RF
Surr: Dioctylphthalate	87.8	54.5-121		%REC	240119	1	03/29/2017 12:03	RF
PERCENT MOISTURE D2216								
Percent Moisture	15.1	0		wt%	R339563	1	03/29/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 30-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-04
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/28/2017 2:36:00 PM
Lab ID:	1703P02-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	9.48	6.45		mg/Kg-dry	240148	5	03/29/2017 17:36	JS
Barium	63.5	2.15		mg/Kg-dry	240148	5	03/29/2017 17:36	JS
Beryllium	0.40	0.22		mg/Kg-dry	240148	5	03/29/2017 17:36	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.1		mg/Kg-dry	240119	1	03/29/2017 12:26	RF
Surr: Dioctylphthalate	92.9	54.5-121		%REC	240119	1	03/29/2017 12:26	RF
PERCENT MOISTURE D2216								
Percent Moisture	17.2	0		wt%	R339563	1	03/29/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 30-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-05
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/28/2017 2:38:00 PM
Lab ID:	1703P02-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.65		mg/Kg-dry	240148	5	03/29/2017 17:42	JS
Barium	33.6	2.55		mg/Kg-dry	240148	5	03/29/2017 17:42	JS
Beryllium	0.41	0.26		mg/Kg-dry	240148	5	03/29/2017 17:42	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.8		mg/Kg-dry	240119	1	03/29/2017 12:49	RF
Surr: Dioctylphthalate	82.4	54.5-121		%REC	240119	1	03/29/2017 12:49	RF
PERCENT MOISTURE D2216								
Percent Moisture	24.0	0		wt%	R339563	1	03/29/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1703P02

ANALYTICAL QC SUMMARY REPORT

BatchID: 240119

Sample ID: **MB-240119**	Client ID:				Units: **mg/Kg**		Prep Date: **03/28/2017**		Run No: **339430**	
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240119**		Analysis Date: **03/28/2017**		Seq No: **7425505**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.587	0	3.300		78.4	54.5	121				

Sample ID: **LCS-240119**	Client ID:				Units: **mg/Kg**		Prep Date: **03/28/2017**		Run No: **339430**	
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240119**		Analysis Date: **03/28/2017**		Seq No: **7425506**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	26.17	6.7	33.30	2.184	72.0	54.6	120				
Surr: Dioctylphthalate	2.772	0	3.330		83.2	54.5	121				

Sample ID: **1703L09-012CMS**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **03/28/2017**		Run No: **339430**	
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240119**		Analysis Date: **03/28/2017**		Seq No: **7425508**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	28.52	8.0	39.53		72.1	40.6	122				
Surr: Dioctylphthalate	2.920	0	3.953		73.9	54.5	121				

Sample ID: **1703L09-012CMSD**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **03/28/2017**		Run No: **339430**	
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240119**		Analysis Date: **03/28/2017**		Seq No: **7425509**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	31.50	8.0	39.53		79.7	40.6	122	28.52	9.93	29.9	
Surr: Dioctylphthalate	3.069	0	3.953		77.6	54.5	121	2.920	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1703P02

ANALYTICAL QC SUMMARY REPORT

BatchID: 240148

Sample ID: **MB-240148** Client ID: Units: **ug/Kg** Prep Date: **03/28/2017** Run No: **339556**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240148** Analysis Date: **03/29/2017** Seq No: **7425834**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									
Beryllium	BRL	50.0									

Sample ID: **LCS-240148** Client ID: Units: **ug/Kg** Prep Date: **03/28/2017** Run No: **339556**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240148** Analysis Date: **03/29/2017** Seq No: **7425835**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500	5000		98.8	80	120				
Barium	5200	500	5000		104	80	120				
Beryllium	5525	50.0	5000		110	80	120				

Sample ID: **1703M82-008CMS** Client ID: Units: **ug/Kg** Prep Date: **03/28/2017** Run No: **339556**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240148** Analysis Date: **03/29/2017** Seq No: **7426081**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	30600	4075	897.7	81.7	75	125				
Barium	13850	2040	4075	9506	107	75	125				
Beryllium	4128	204	4075		101	75	125				

Sample ID: **1703M82-008CMSD** Client ID: Units: **ug/Kg** Prep Date: **03/28/2017** Run No: **339556**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240148** Analysis Date: **03/29/2017** Seq No: **7426043**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	30500	4072	897.7	78.5	75	125	4228	0	20	
Barium	13390	2040	4072	9506	95.3	75	125	13850	3.39	20	
Beryllium	4355	204	4072		107	75	125	4128	5.36	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 31, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1703R09

Analytical Environmental Services, Inc. received 5 samples on 3/30/2017 10:40:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive Atlanta GA 30340- 3906
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1703R09

Date: 3/29/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE BIN 10185 Atlanta, GA 30308
PHONE: 770-296-9648
FAX:
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)			REMARKS	No # of Containers
1	SS-02	3/29/17	0900		X	SO	X				
2	APCS-05	3/29/17	1315	X		SO		X			
3	ASTCS-06	3/29/17	1330	X		SO		X	X		
4	ASTCS-07	3/29/17	1335	X		SO		X	X		
5	ASTCS-08	3/29/17	1340	X		SO		X	X		
6											
7											
8											
9											
10											
11											
12											
13											
14											

PRESERVATION (See codes): 1 = EPA 6020 Arsenic only; 2 = EPA 6020 Arsenic Speciation; 3 = EPA 8015 TPH-DRO

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	3/29/17 1430	1: to Robert	3/30/17 1040
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Portsmouth GA
SEND REPORT TO: listed recipients
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

SPECIAL INSTRUCTIONS/COMMENTS:
stephen.wilson@Resolute-env.com
LLmillet@southernco.com
forrest.howard@resolute-env.com

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
☐ CLIENT ☒ FedEx ☐ UPS ☐ MAIL ☐ COURIER
☐ GREYHOUND ☐ OTHER

RECEIPT
Total # of Containers

Turnaround Time Request
☐ Standard 5 Business Days
☐ 2 Business Day Rush
☒ Next Business Day Rush
☐ Same Day Rush **(auth req.)**
☐ Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: ☐ I ☐ II ☐ III ☐ IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED WITH STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) WW=Wastewater DW=Drinking Water O = Other (specify)
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	SS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 9:00:00 AM
Lab ID:	1703R09-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**			
Arsenic	BRL	6.91		mg/Kg-dry	240283	1	03/31/2017 01:37	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.7	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-05
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 1:15:00 PM
Lab ID:	1703R09-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.13		mg/Kg-dry	240283	1	03/31/2017 01:40	JR
Barium	14.8	0.48		mg/Kg-dry	240283	1	03/31/2017 18:44	JS
Beryllium	0.06	0.05		mg/Kg-dry	240283	1	03/31/2017 18:44	JS
PERCENT MOISTURE D2216								
Percent Moisture	8.14	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-06
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 1:30:00 PM
Lab ID:	1703R09-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.58		mg/Kg-dry	240283	1	03/31/2017 01:43	JR
Barium	137	1.01		mg/Kg-dry	240283	2	03/31/2017 19:16	JS
Beryllium	0.54	0.05		mg/Kg-dry	240283	1	03/31/2017 18:50	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.8		mg/Kg-dry	240302	1	03/30/2017 22:54	RF
Surr: Dioctylphthalate	84.6	54.5-121		%REC	240302	1	03/30/2017 22:54	RF
PERCENT MOISTURE D2216								
Percent Moisture	14.6	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-07
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 1:35:00 PM
Lab ID:	1703R09-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	10.2	6.93		mg/Kg-dry	240283	1	03/31/2017 16:03	JR
Barium	29.4	0.46		mg/Kg-dry	240283	1	03/31/2017 18:56	JS
Beryllium	0.29	0.05		mg/Kg-dry	240283	1	03/31/2017 18:56	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.9		mg/Kg-dry	240302	1	03/30/2017 22:07	RF
Surr: Dioctylphthalate	76.3	54.5-121		%REC	240302	1	03/30/2017 22:07	RF
PERCENT MOISTURE D2216								
Percent Moisture	15.2	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-08
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 1:40:00 PM
Lab ID:	1703R09-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.48		mg/Kg-dry	240283	1	03/31/2017 01:50	JR
Barium	21.9	0.43		mg/Kg-dry	240283	1	03/31/2017 19:02	JS
Beryllium	0.17	0.04		mg/Kg-dry	240283	1	03/31/2017 19:02	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.3		mg/Kg-dry	240302	1	03/30/2017 22:31	RF
Surr: Dioctylphthalate	75.6	54.5-121		%REC	240302	1	03/30/2017 22:31	RF
PERCENT MOISTURE D2216								
Percent Moisture	19.4	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1703R09

ANALYTICAL QC SUMMARY REPORT

BatchID: 240283

Sample ID: **MB-240283** Client ID: Units: **ug/Kg** Prep Date: **03/29/2017** Run No: **339650**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/30/2017** Seq No: **7428173**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									

Sample ID: **MB-240283** Client ID: Units: **ug/Kg** Prep Date: **03/29/2017** Run No: **339780**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/31/2017** Seq No: **7432285**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	BRL	500									
Beryllium	BRL	50.0									

Sample ID: **LCS-240283** Client ID: Units: **ug/Kg** Prep Date: **03/29/2017** Run No: **339650**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/30/2017** Seq No: **7428174**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5222	5000	5000		104	80	120				

Sample ID: **LCS-240283** Client ID: Units: **ug/Kg** Prep Date: **03/29/2017** Run No: **339780**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/31/2017** Seq No: **7432286**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	5020	500	5000		100	80	120				
Beryllium	4574	50.0	5000		91.5	80	120				

Sample ID: **1703P26-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **03/29/2017** Run No: **339650**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/30/2017** Seq No: **7428177**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.102	6.24	4.158	3.740	105	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1703R09

ANALYTICAL QC SUMMARY REPORT

BatchID: 240283

Sample ID: **1703P26-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **03/29/2017** Run No: **339780**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/31/2017** Seq No: **7432288**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	35.11	0.42	4.158	36.77	-40.0	75	125				S
Beryllium	4.128	0.04	4.158	0.2427	93.5	75	125				

Sample ID: **1703P26-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **03/29/2017** Run No: **339650**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/30/2017** Seq No: **7428178**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.741	6.25	4.169	3.740	120	75	125	8.102	7.59	20	

Sample ID: **1703P26-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **03/29/2017** Run No: **339780**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/31/2017** Seq No: **7432289**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	41.24	0.42	4.169	36.77	107	75	125	35.11	16.1	20	
Beryllium	4.078	0.04	4.169	0.2427	92.0	75	125	4.128	1.22	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1703R09

ANALYTICAL QC SUMMARY REPORT

BatchID: 240302

Sample ID: **MB-240302**	Client ID:			Units: **mg/Kg**		Prep Date: **03/30/2017**		Run No: **339666**	
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **240302**		Analysis Date: **03/30/2017**		Seq No: **7429770**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.743	0	3.300		83.1	54.5	121				

Sample ID: **LCS-240302**	Client ID:			Units: **mg/Kg**		Prep Date: **03/30/2017**		Run No: **339666**	
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **240302**		Analysis Date: **03/30/2017**		Seq No: **7429773**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	27.31	6.7	33.30		82.0	54.6	120				
Surr: Dioctylphthalate	2.626	0	3.330		78.9	54.5	121				

Sample ID: **1703Q30-004BMS**	Client ID:			Units: **mg/Kg-dry**		Prep Date: **03/30/2017**		Run No: **339666**	
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **240302**		Analysis Date: **03/30/2017**		Seq No: **7429776**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	45.40	7.1	35.43	14.33	87.7	40.6	122				
Surr: Dioctylphthalate	2.748	0	3.543		77.6	54.5	121				

Sample ID: **1703Q30-004BMSD**	Client ID:			Units: **mg/Kg-dry**		Prep Date: **03/30/2017**		Run No: **339666**	
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **240302**		Analysis Date: **03/30/2017**		Seq No: **7429777**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	46.80	7.1	35.43	14.33	91.6	40.6	122	45.40	3.03	29.9	
Surr: Dioctylphthalate	3.010	0	3.543		85.0	54.5	121	2.748	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

April 14, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1704A75

Analytical Environmental Services, Inc. received 2 samples on 4/13/2017 7:40:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1704A75

Date: 4/12/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McBill blvd SE BIO16S Atlanta, GA 30308
PHONE: 770 246 8848
EMAIL: forrest.howard@ Resolveenv.com
SAMPLED BY: Forrest Howard
SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 Arsenic, Aluminum, Beryllium	ANALYSIS REQUESTED: EPA 8015 TPH-DRO	PRESERVATION (see codes)	REMARKS	Number of Containers
1	APCS-11	4/12/17	0920	X		SO	X				
2	ASTCS-21	4/12/17	1500	X		SO	X	X			
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	4/12/17 1700	1. Fedex	
2.		2. Miriam Pacurar	4/13/17 10AM
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to: stephen.wilson@ Resolveenv.com LL millet@ southernco.com Forrest.howard@ Resolveenv.com

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client (FedEx) UPS US mail courier Greyhound
Account number other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, port wentworth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
shipped w/ AES Account #
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- [ ] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [x] Next Business Day Rush
- [ ] Same-Day Rush (auth req.)
- [ ] Other _____

STATE PROGRAM (if any): _____
E-mail? [ ] Fax? [ ]
DATA PACKAGE: I [ ] II [ ] III [ ] IV [ ]

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 14-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-11
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/12/2017 9:20:00 AM
Lab ID:	1704A75-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.52		mg/Kg-dry	240900	1	04/13/2017 16:31	JS
Barium	20.0	0.37		mg/Kg-dry	240900	1	04/13/2017 16:31	JS
Beryllium	0.24	0.04		mg/Kg-dry	240900	1	04/13/2017 16:31	JS
PERCENT MOISTURE D2216								
Percent Moisture	20.8	0		wt%	R340682	1	04/13/2017 15:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 14-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-21
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/12/2017 3:00:00 PM
Lab ID:	1704A75-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	5.10		mg/Kg-dry	240900	1	04/13/2017 16:37	JS
Barium	23.3	0.34		mg/Kg-dry	240900	1	04/13/2017 16:37	JS
Beryllium	0.21	0.03		mg/Kg-dry	240900	1	04/13/2017 16:37	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.6		mg/Kg-dry	240907	1	04/13/2017 15:05	RF
Surr: Dioctylphthalate	67.7	54.5-121		%REC	240907	1	04/13/2017 15:05	RF
PERCENT MOISTURE D2216								
Percent Moisture	21.7	0		wt%	R340682	1	04/13/2017 15:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1704A75

ANALYTICAL QC SUMMARY REPORT

BatchID: 240900

Sample ID: **MB-240900** Client ID: Units: **ug/Kg** Prep Date: **04/12/2017** Run No: **340568**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240900** Analysis Date: **04/12/2017** Seq No: **7453501**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									
Beryllium	BRL	50.0									

Sample ID: **LCS-240900** Client ID: Units: **ug/Kg** Prep Date: **04/12/2017** Run No: **340568**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240900** Analysis Date: **04/12/2017** Seq No: **7453502**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4317	1000	5000	199.8	82.3	80	120				
Barium	4922	500	5000		98.4	80	120				
Beryllium	4549	50.0	5000		91.0	80	120				

Sample ID: **1704917-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **04/12/2017** Run No: **340568**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240900** Analysis Date: **04/12/2017** Seq No: **7453504**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7694	7690	5492	2373	96.9	75	125				
Barium	40420	549	5492	33980	117	75	125				
Beryllium	5429	54.9	5492	196.2	95.3	75	125				

Sample ID: **1704917-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **04/12/2017** Run No: **340568**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240900** Analysis Date: **04/12/2017** Seq No: **7453505**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7405	7320	5230	2373	96.2	75	125	7694	3.83	20	
Barium	40670	523	5230	33980	128	75	125	40420	0.603	20	S
Beryllium	5298	52.3	5230	196.2	97.5	75	125	5429	2.45	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1704A75

ANALYTICAL QC SUMMARY REPORT

BatchID: 240907

Sample ID: **MB-240907**	Client ID:				Units: **mg/Kg**		Prep Date: **04/12/2017**		Run No: **340563**	
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240907**		Analysis Date: **04/12/2017**		Seq No: **7453229**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.743	0	3.300		83.1	54.5	121				

Sample ID: **LCS-240907**	Client ID:				Units: **mg/Kg**		Prep Date: **04/12/2017**		Run No: **340563**	
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240907**		Analysis Date: **04/12/2017**		Seq No: **7453407**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	23.91	6.7	33.30		71.8	54.6	120				
Surr: Dioctylphthalate	2.752	0	3.330		82.6	54.5	121				

Sample ID: **1704784-002CMS**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **04/12/2017**		Run No: **340563**	
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240907**		Analysis Date: **04/12/2017**		Seq No: **7454711**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	99.69	8.0	39.52	107.2	-19.0	40.6	122				S
Surr: Dioctylphthalate	3.330	0	3.952		84.3	54.5	121				

Sample ID: **1704784-002CMSD**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **04/12/2017**		Run No: **340563**	
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **240907**		Analysis Date: **04/12/2017**		Seq No: **7454712**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	111.1	8.0	39.52	107.2	9.98	40.6	122	99.69	10.9	29.9	S
Surr: Dioctylphthalate	3.678	0	3.952		93.1	54.5	121	3.330	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 11, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708A51

Analytical Environmental Services, Inc. received 10 samples on 8/10/2017 10:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708A51

Date: 8/9/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
PHONE: 770 296 9648	EMAIL: forrest.howard@Resolutecs.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: RCRA 6020 As Ba	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	SRCS-01	8/9/17	0915	X		SO	X	X		1
2	SRCS-02	8/9/17	0918	X		SO	X	X		1
3	LFCS-02	8/9/17	1435	X		SO	X	X		1
4	LFCS-03	8/9/17	1437	X		SO	X	X		1
5	LFCS-04	8/9/17	1440	X		SO	X	X		1
6	LFCS-05	8/9/17	1442	X		SO	X	X		1
7	LFCS-07	8/9/17	1505	X		SO	X	X		1
8	LFCS-08	8/9/17	1508	X		SO	X	X		1
9	LFCS-09	8/9/17	1510	X		SO	X	X		1
10	LFCS-06	8/9/17	1455	X		SO	X	X		1
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/9/17 1700	1. To Fedex	
2.		2.	8/10/17 10:30
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Forrest Howard
Stephen Wilson
Trent Godwin
Liz Heaven
Lew Millet

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Cross gate Rd Port Wentworth GA
SEND REPORT TO: In Comments
INVOICE TO:
(IF DIFFERENT FROM ABOVE)
GPC Environmental Affairs
AES Fedex account used
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 10

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1708A51

Case Narrative

Per Forrest Howard via phone 8/10/2017 11:35am, same day turnaround was required for samples "SRCS-01" and "SRCS-02."

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-01
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 9:15:00 AM
Lab ID:	1708A51-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	18.8	5.96		mg/Kg-dry	246708	1	08/10/2017 15:23	JR
Barium	20.8	0.40		mg/Kg-dry	246708	1	08/10/2017 15:23	JR
PERCENT MOISTURE D2216								
Percent Moisture	1.91	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 9:18:00 AM
Lab ID:	1708A51-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	98.9	6.78		mg/Kg-dry	246708	1	08/10/2017 15:29	JR
Barium	15.2	0.45		mg/Kg-dry	246708	1	08/10/2017 15:29	JR
PERCENT MOISTURE D2216								
Percent Moisture	1.70	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:35:00 PM
Lab ID:	1708A51-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.42		mg/Kg-dry	246708	1	08/10/2017 16:44	JR
Barium	22.3	0.50		mg/Kg-dry	246708	1	08/10/2017 16:44	JR
PERCENT MOISTURE D2216								
Percent Moisture	11.3	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-03
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:37:00 PM
Lab ID:	1708A51-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.09		mg/Kg-dry	246708	1	08/10/2017 16:51	JR
Barium	35.1	0.54		mg/Kg-dry	246708	1	08/10/2017 16:51	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.4	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-04
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:40:00 PM
Lab ID:	1708A51-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.67		mg/Kg-dry	246708	1	08/10/2017 16:57	JR
Barium	120	0.44		mg/Kg-dry	246708	1	08/10/2017 16:57	JR
PERCENT MOISTURE D2216								
Percent Moisture	13.6	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-05
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:42:00 PM
Lab ID:	1708A51-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.02		mg/Kg-dry	246708	1	08/10/2017 17:03	JR
Barium	69.6	0.54		mg/Kg-dry	246708	1	08/10/2017 17:03	JR
PERCENT MOISTURE D2216								
Percent Moisture	17.0	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-07
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 3:05:00 PM
Lab ID:	1708A51-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.76		mg/Kg-dry	246708	1	08/10/2017 17:09	JR
Barium	22.2	0.52		mg/Kg-dry	246708	1	08/10/2017 17:09	JR
PERCENT MOISTURE D2216								
Percent Moisture	15.0	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-08
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 3:08:00 PM
Lab ID:	1708A51-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.40		mg/Kg-dry	246708	1	08/10/2017 17:15	JR
Barium	39.7	0.43		mg/Kg-dry	246708	1	08/10/2017 17:15	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.6	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-09
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 3:10:00 PM
Lab ID:	1708A51-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	8.65		mg/Kg-dry	246708	1	08/10/2017 17:22	JR
Barium	27.6	0.58		mg/Kg-dry	246708	1	08/10/2017 17:22	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.8	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	LFCS-06
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/9/2017 2:55:00 PM
Lab ID:	1708A51-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.41		mg/Kg-dry	246708	1	08/10/2017 17:28	JR
Barium	42.5	0.43		mg/Kg-dry	246708	1	08/10/2017 17:28	JR
PERCENT MOISTURE D2216								
Percent Moisture	24.5	0		wt%	R349499	1	08/10/2017 15:30	VH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1708A51**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	○	◉	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.5 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments:

I certify that I have completed sections 1-15 (dated initials). TR 8/10/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: 4OZWMGTLS

I certify that I have completed sections 16-27 (dated initials). BB 8/10/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). BB 8/10/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708A51

ANALYTICAL QC SUMMARY REPORT

BatchID: 246708

Sample ID: **MB-246708** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678588**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246708** Client ID: Units: **ug/Kg** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678589**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4688	1500	5000		93.8	80	120				
Barium	5135	500	5000		103	80	120				

Sample ID: **1708897-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678591**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8.06	5.371	1.234	74.6	75	125				S
Barium	39.30	0.54	5.371	30.05	172	75	125				S

Sample ID: **1708897-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **08/09/2017** Run No: **349401**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246708** Analysis Date: **08/09/2017** Seq No: **7678592**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	8.05	5.370	1.234	71.1	75	125	5.243	0	20	S
Barium	41.82	0.54	5.370	30.05	219	75	125	39.30	6.23	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 16, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708E52

Analytical Environmental Services, Inc. received 3 samples on 8/15/2017 10:25:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708E52

Date: 8/14/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill blvd SE B10185 Atlanta GA 30308
PHONE: 770-296-9648	EMAIL: forrest.howard@RestHoward.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: EPA 6020 As Ba	PRESERVATION (see codes): I	REMARKS	Number of Containers
1	SRCS-02A	8/14/17	1015	X		SO	X	X		1
2	SRCS-02A-N	8/14/17	1018	X		SO	X	X		1
3	SRCS-02A-W	8/14/17	1020	X		SO	X	X		1
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/14/17 1700	1. To Fedex	
2.		2.	8/15/17 10:25
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION

PROJECT NAME: Hunt Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Cross gate Rd, Porterworth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
AES Fedex account used
QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 3

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 16-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-02A
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/14/2017 10:15:00 AM
Lab ID:	1708E52-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.96		mg/Kg-dry	246962	10	08/16/2017 12:33	JR
Barium	5.62	4.64		mg/Kg-dry	246962	10	08/16/2017 12:33	JR
PERCENT MOISTURE D2216								
Percent Moisture	8.08	0		wt%	R349915	1	08/16/2017 14:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 16-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-02A-N
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/14/2017 10:18:00 AM
Lab ID:	1708E52-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	25.5	7.85		mg/Kg-dry	246962	10	08/16/2017 13:05	JR
Barium	8.22	5.23		mg/Kg-dry	246962	10	08/16/2017 13:05	JR
PERCENT MOISTURE D2216								
Percent Moisture	5.59	0		wt%	R349915	1	08/16/2017 14:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 16-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-02A-W
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/14/2017 10:20:00 AM
Lab ID:	1708E52-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.32		mg/Kg-dry	246962	10	08/16/2017 13:11	JR
Barium	11.6	4.22		mg/Kg-dry	246962	10	08/16/2017 13:11	JR
PERCENT MOISTURE D2216								
Percent Moisture	10.5	0		wt%	R349915	1	08/16/2017 14:00	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1708E52**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	◉	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 2.7 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TR 8/15/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). BB 8/15/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). BB 8/15/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708E52

ANALYTICAL QC SUMMARY REPORT

BatchID: 246962

Sample ID: **MB-246962** Client ID: Units: **ug/Kg** Prep Date: **08/15/2017** Run No: **349920**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246962** Analysis Date: **08/16/2017** Seq No: **7689187**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									
Barium	BRL	500									

Sample ID: **LCS-246962** Client ID: Units: **ug/Kg** Prep Date: **08/15/2017** Run No: **349920**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246962** Analysis Date: **08/16/2017** Seq No: **7689188**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4610	1500	5000		92.2	80	120				
Barium	4944	500	5000		98.9	80	120				

Sample ID: **1708E52-001AMS** Client ID: **SRCS-02A** Units: **mg/Kg-dry** Prep Date: **08/15/2017** Run No: **349920**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246962** Analysis Date: **08/16/2017** Seq No: **7689190**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.070	6.93	4.619	3.253	104	75	125				
Barium	10.90	4.62	4.619	5.615	114	75	125				

Sample ID: **1708E52-001AMSD** Client ID: **SRCS-02A** Units: **mg/Kg-dry** Prep Date: **08/15/2017** Run No: **349920**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **246962** Analysis Date: **08/16/2017** Seq No: **7689191**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.871	6.96	4.640	3.253	121	75	125	8.070	9.46	20	
Barium	11.80	4.64	4.640	5.615	133	75	125	10.90	8.00	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

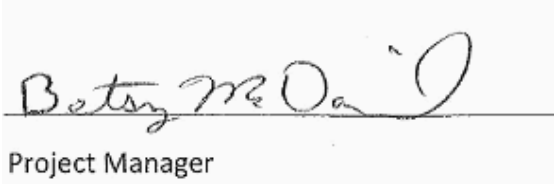
Georgia Power
2480 Maner Road
Atlanta, GA 30339

Attention: **Mr. Joju Abraham**

Report Number: **AZI0050**
September 13, 2016
Project: CCR Event
Project #:Plant Kraft

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

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All test results relate only to the samples analyzed.

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
KMW-5	AZI0050-01	Ground Water	09/01/16 14:30	09/02/16 09:05
KMW-6	AZI0050-02	Ground Water	09/01/16 16:30	09/02/16 09:05
Dup-1	AZI0050-03	Ground Water	09/01/16 00:00	09/02/16 09:05
KMW-2	AZI0050-04	Ground Water	09/01/16 13:10	09/02/16 09:05
KMW-7	AZI0050-05	Ground Water	09/01/16 14:41	09/02/16 09:05
KMW-1	AZI0050-06	Ground Water	09/01/16 15:55	09/02/16 09:05
FBL090116	AZI0050-07	DI Water	09/01/16 16:35	09/02/16 09:05
EQBL090116	AZI0050-08	DI Water	09/01/16 16:45	09/02/16 09:05

PACE ANALYTICAL SERVICES, INC.

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110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050
Client ID: KMW-5
Date/Time Sampled: 9/1/2016 2:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0050-01
Date/Time Received: 9/2/2016 9:05:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	4540	25	10	mg/L	SM 2540 C		1	09/07/16 14:20	09/07/16 14:20	6090156	JPT
Inorganic Anions											
Chloride	2200	25	1.4	mg/L	EPA 300.0	B-01	100	09/05/16 10:11	09/07/16 02:15	6090088	RLC
Fluoride	0.34	0.30	0.02	mg/L	EPA 300.0		1	09/05/16 10:11	09/05/16 18:59	6090088	RLC
Sulfate	430	100	5.1	mg/L	EPA 300.0		100	09/05/16 10:11	09/07/16 02:15	6090088	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Arsenic	0.0088	0.0050	0.0016	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Barium	0.0644	0.0100	0.0004	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Beryllium	0.0007	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Boron	0.695	0.100	0.0064	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Calcium	223	25.0	1.55	mg/L	EPA 6020B		50	09/06/16 10:15	09/08/16 17:47	6090062	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Cobalt	0.0203	0.0100	0.0005	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Lead	0.0001	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Selenium	0.0036	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Lithium	0.0173	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:14	6090062	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/06/16 11:30	09/06/16 16:21	6090078	MTC

PACE ANALYTICAL SERVICES, INC.

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(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050
Client ID: KMW-6
Date/Time Sampled: 9/1/2016 4:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0050-02
Date/Time Received: 9/2/2016 9:05:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	4920	25	10	mg/L	SM 2540 C		1	09/07/16 19:40	09/07/16 19:40	6090134	JPT
Inorganic Anions											
Chloride	2400	25	1.4	mg/L	EPA 300.0	B-01	100	09/05/16 10:11	09/07/16 02:35	6090088	RLC
Fluoride	0.26	0.30	0.02	mg/L	EPA 300.0	J	1	09/05/16 10:11	09/05/16 20:01	6090088	RLC
Sulfate	400	100	5.1	mg/L	EPA 300.0		100	09/05/16 10:11	09/07/16 02:35	6090088	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Arsenic	0.0020	0.0050	0.0016	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Barium	0.0794	0.0100	0.0004	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Boron	0.898	0.100	0.0064	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Calcium	242	25.0	1.55	mg/L	EPA 6020B		50	09/06/16 10:15	09/08/16 17:53	6090062	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Cobalt	0.0007	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Selenium	0.0021	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Lithium	0.0418	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:20	6090062	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/06/16 11:30	09/06/16 16:23	6090078	MTC

PACE ANALYTICAL SERVICES, INC.

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(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050
Client ID: Dup-1
Date/Time Sampled: 9/1/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0050-03
Date/Time Received: 9/2/2016 9:05:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	4400	25	10	mg/L	SM 2540 C		1	09/07/16 19:40	09/07/16 19:40	6090134	JPT
Inorganic Anions											
Chloride	2400	25	1.4	mg/L	EPA 300.0	B-01	100	09/05/16 10:11	09/07/16 02:56	6090088	RLC
Fluoride	0.34	0.30	0.02	mg/L	EPA 300.0		1	09/05/16 10:11	09/05/16 21:44	6090088	RLC
Sulfate	470	100	5.1	mg/L	EPA 300.0		100	09/05/16 10:11	09/07/16 02:56	6090088	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Arsenic	0.0086	0.0050	0.0016	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Barium	0.0635	0.0100	0.0004	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Beryllium	0.0007	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Boron	0.652	0.100	0.0064	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Calcium	220	25.0	1.55	mg/L	EPA 6020B		50	09/06/16 10:15	09/08/16 17:59	6090062	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Cobalt	0.0192	0.0100	0.0005	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Lead	0.0001	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Selenium	0.0031	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Lithium	0.0167	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:26	6090062	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/06/16 11:30	09/06/16 16:26	6090078	MTC

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050
Client ID: KMW-2
Date/Time Sampled: 9/1/2016 1:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0050-04
Date/Time Received: 9/2/2016 9:05:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	286	25	10	mg/L	SM 2540 C		1	09/07/16 19:40	09/07/16 19:40	6090134	JPT
Inorganic Anions											
Chloride	120	1.2	0.07	mg/L	EPA 300.0	B-01	5	09/05/16 10:11	09/07/16 03:17	6090088	RLC
Fluoride	0.12	0.30	0.02	mg/L	EPA 300.0	J	1	09/05/16 10:11	09/05/16 22:05	6090088	RLC
Sulfate	73	5.0	0.26	mg/L	EPA 300.0		5	09/05/16 10:11	09/07/16 03:17	6090088	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Arsenic	0.0095	0.0050	0.0016	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Barium	0.0666	0.0100	0.0004	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Boron	0.349	0.100	0.0064	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Calcium	8.90	0.500	0.0311	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Lithium	0.0044	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:31	6090062	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/06/16 11:30	09/06/16 16:28	6090078	MTC

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050
Client ID: KMW-7
Date/Time Sampled: 9/1/2016 2:41:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0050-05
Date/Time Received: 9/2/2016 9:05:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1960	25	10	mg/L	SM 2540 C		1	09/07/16 19:40	09/07/16 19:40	6090134	JPT
Inorganic Anions											
Chloride	920	12	0.70	mg/L	EPA 300.0	B-01	50	09/05/16 10:11	09/12/16 13:11	6090088	RLC
Fluoride	0.40	0.30	0.02	mg/L	EPA 300.0		1	09/05/16 10:11	09/05/16 22:26	6090088	RLC
Sulfate	310	50	2.6	mg/L	EPA 300.0		50	09/05/16 10:11	09/12/16 13:11	6090088	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Arsenic	0.0045	0.0050	0.0016	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Barium	0.0520	0.0100	0.0004	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Beryllium	0.0004	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Boron	0.579	0.100	0.0064	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Calcium	44.3	2.50	0.155	mg/L	EPA 6020B		5	09/06/16 10:15	09/08/16 18:05	6090062	CSW
Chromium	0.0010	0.0100	0.0009	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Cobalt	0.0014	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Selenium	0.0030	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Lithium	0.0034	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:37	6090062	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/07/16 08:50	09/07/16 15:55	6090123	MTC

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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050
Client ID: KMW-1
Date/Time Sampled: 9/1/2016 3:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0050-06
Date/Time Received: 9/2/2016 9:05:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	2820	25	10	mg/L	SM 2540 C		1	09/07/16 19:40	09/07/16 19:40	6090134	JPT
Inorganic Anions											
Chloride	1300	25	1.4	mg/L	EPA 300.0	B-01	100	09/05/16 10:11	09/07/16 03:58	6090088	RLC
Fluoride	0.60	0.30	0.02	mg/L	EPA 300.0		1	09/05/16 10:11	09/05/16 22:46	6090088	RLC
Sulfate	240	100	5.1	mg/L	EPA 300.0		100	09/05/16 10:11	09/07/16 03:58	6090088	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Arsenic	0.0081	0.0050	0.0016	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Barium	0.0614	0.0100	0.0004	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Beryllium	0.0021	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Boron	0.989	0.100	0.0064	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Calcium	119	25.0	1.55	mg/L	EPA 6020B		50	09/06/16 10:15	09/08/16 18:30	6090062	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Cobalt	0.0210	0.0100	0.0005	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Lead	0.0002	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Selenium	0.0050	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Thallium	0.0004	0.0010	0.0002	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Lithium	0.0172	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:43	6090062	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/07/16 08:50	09/07/16 15:57	6090123	MTC

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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050
Client ID: FBL090116
Date/Time Sampled: 9/1/2016 4:35:00PM
Matrix: DI Water

Project: CCR Event
Lab Number ID: AZI0050-07
Date/Time Received: 9/2/2016 9:05:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	09/07/16 19:40	09/07/16 19:40	6090134	JPT
Inorganic Anions											
Chloride	0.60	0.25	0.01	mg/L	EPA 300.0	B-01	1	09/05/16 10:11	09/05/16 23:07	6090088	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/05/16 10:11	09/05/16 23:07	6090088	RLC
Sulfate	0.38	1.0	0.05	mg/L	EPA 300.0	J	1	09/05/16 10:11	09/05/16 23:07	6090088	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Boron	0.0065	0.100	0.0064	mg/L	EPA 6020B	J	1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 19:49	6090062	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/07/16 08:50	09/07/16 15:59	6090123	MTC

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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050
Client ID: EQBL090116
Date/Time Sampled: 9/1/2016 4:45:00PM
Matrix: DI Water

Project: CCR Event
Lab Number ID: AZI0050-08
Date/Time Received: 9/2/2016 9:05:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	09/07/16 19:40	09/07/16 19:40	6090134	JPT
Inorganic Anions											
Chloride	0.26	0.25	0.01	mg/L	EPA 300.0	B-01	1	09/05/16 10:11	09/05/16 23:28	6090088	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/05/16 10:11	09/05/16 23:28	6090088	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	09/05/16 10:11	09/05/16 23:28	6090088	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/06/16 10:15	09/07/16 20:06	6090062	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/07/16 08:50	09/07/16 16:02	6090123	MTC

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Georgia Power
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Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090134 - SM 2540 C											
Blank (6090134-BLK1)						Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6090134-BS1)						Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	375	25	10	mg/L	400.00		94	84-108			
Duplicate (6090134-DUP1)		**Source: AZI0050-02**				Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	4860	25	10	mg/L		4920			1	10	
Duplicate (6090134-DUP2)		**Source: AZI0051-03**				Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	393	25	10	mg/L		396			0.8	10	
Batch 6090156 - SM 2540 C											
Blank (6090156-BLK1)						Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6090156-BS1)						Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	398	25	10	mg/L	400.00		100	84-108			
Duplicate (6090156-DUP1)		**Source: AZI0050-01**				Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	4530	25	10	mg/L		4540			0.3	10	

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September 13, 2016

Report No.: AZI0050

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090088 - EPA 300.0											
Blank (6090088-BLK1)						Prepared & Analyzed: 09/05/16					
Chloride	0.05	0.25	0.01	mg/L							J
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6090088-BS1)						Prepared & Analyzed: 09/05/16					
Chloride	10.1	0.25	0.01	mg/L	10.010		101	90-110			
Fluoride	10.0	0.30	0.02	mg/L	10.010		100	90-110			
Sulfate	10.2	1.0	0.05	mg/L	10.010		102	90-110			
Matrix Spike (6090088-MS1)		**Source: AZI0050-01**				Prepared & Analyzed: 09/05/16					
Chloride	466	0.25	0.01	mg/L	10.010	478	NR	90-110			QM-02
Fluoride	11.8	0.30	0.02	mg/L	10.010	0.34	114	90-110			QM-05
Sulfate	275	1.0	0.05	mg/L	10.010	291	NR	90-110			QM-02
Matrix Spike (6090088-MS2)		**Source: AZI0059-03**				Prepared: 09/05/16 Analyzed: 09/06/16					
Chloride	13.9	0.25	0.01	mg/L	10.010	3.33	105	90-110			
Fluoride	10.9	0.30	0.02	mg/L	10.010	0.20	107	90-110			
Sulfate	12.7	1.0	0.05	mg/L	10.010	2.66	101	90-110			
Matrix Spike Dup (6090088-MSD1)		**Source: AZI0050-01**				Prepared & Analyzed: 09/05/16					
Chloride	486	0.25	0.01	mg/L	10.010	478	84	90-110	4	15	QM-02
Fluoride	11.7	0.30	0.02	mg/L	10.010	0.34	114	90-110	0.4	15	QM-05
Sulfate	275	1.0	0.05	mg/L	10.010	291	NR	90-110	0.1	15	QM-02

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Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090062 - EPA 3005A											
Blank (6090062-BLK1)						Prepared: 09/06/16 Analyzed: 09/07/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.100	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0050	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0050	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0050	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (6090062-BS1)						Prepared: 09/06/16 Analyzed: 09/07/16					
Antimony	0.111	0.0030	0.0008	mg/L	0.10000		111	80-120			
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000		101	80-120			
Barium	0.100	0.0100	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.104	0.0030	0.00008	mg/L	0.10000		104	80-120			
Boron	1.04	0.100	0.0064	mg/L	1.0000		104	80-120			
Cadmium	0.105	0.0010	0.00007	mg/L	0.10000		105	80-120			
Calcium	1.00	0.500	0.0311	mg/L	1.0000		100	80-120			
Chromium	0.104	0.0100	0.0009	mg/L	0.10000		104	80-120			
Cobalt	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Copper	0.101	0.0050	0.0005	mg/L	0.10000		101	80-120			
Lead	0.100	0.0050	0.0001	mg/L	0.10000		100	80-120			
Molybdenum	0.105	0.0100	0.0017	mg/L	0.10000		105	80-120			
Nickel	0.102	0.0050	0.0006	mg/L	0.10000		102	80-120			
Selenium	0.107	0.0100	0.0010	mg/L	0.10000		107	80-120			
Silver	0.101	0.0050	0.0005	mg/L	0.10000		101	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000		103	80-120			
Zinc	0.105	0.0100	0.0021	mg/L	0.10000		105	80-120			
Lithium	0.106	0.0500	0.0021	mg/L	0.10000		106	80-120			

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090062 - EPA 3005A											
Matrix Spike (6090062-MS1)		**Source: AZI0050-04**				Prepared: 09/06/16 Analyzed: 09/07/16					
Antimony	0.106	0.0030	0.0008	mg/L	0.10000	ND	106	75-125			
Arsenic	0.111	0.0050	0.0016	mg/L	0.10000	0.0095	102	75-125			
Barium	0.157	0.0100	0.0004	mg/L	0.10000	0.0666	91	75-125			
Beryllium	0.0934	0.0030	0.00008	mg/L	0.10000	ND	93	75-125			
Boron	1.14	0.100	0.0064	mg/L	1.0000	0.349	79	75-125			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	ND	102	75-125			
Calcium	9.88	0.500	0.0311	mg/L	1.0000	8.90	97	75-125			
Chromium	0.101	0.0100	0.0009	mg/L	0.10000	ND	101	75-125			
Cobalt	0.0950	0.0100	0.0005	mg/L	0.10000	ND	95	75-125			
Copper	0.0995	0.0050	0.0005	mg/L	0.10000	ND	99	75-125			
Lead	0.0961	0.0050	0.0001	mg/L	0.10000	ND	96	75-125			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125			
Nickel	0.104	0.0050	0.0006	mg/L	0.10000	0.0042	99	75-125			
Selenium	0.100	0.0100	0.0010	mg/L	0.10000	ND	100	75-125			
Silver	0.0927	0.0050	0.0005	mg/L	0.10000	ND	93	75-125			
Thallium	0.0952	0.0010	0.0002	mg/L	0.10000	ND	95	75-125			
Vanadium	0.104	0.0100	0.0071	mg/L	0.10000	ND	104	75-125			
Zinc	0.108	0.0100	0.0021	mg/L	0.10000	0.0026	105	75-125			
Lithium	0.102	0.0500	0.0021	mg/L	0.10000	0.0044	98	75-125			
Matrix Spike Dup (6090062-MSD1)		**Source: AZI0050-04**				Prepared: 09/06/16 Analyzed: 09/07/16					
Antimony	0.107	0.0030	0.0008	mg/L	0.10000	ND	107	75-125	0.8	20	
Arsenic	0.111	0.0050	0.0016	mg/L	0.10000	0.0095	102	75-125	0.003	20	
Barium	0.143	0.0100	0.0004	mg/L	0.10000	0.0666	77	75-125	9	20	
Beryllium	0.0897	0.0030	0.00008	mg/L	0.10000	ND	90	75-125	4	20	
Boron	1.05	0.100	0.0064	mg/L	1.0000	0.349	70	75-125	8	20	QM-02
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000	ND	101	75-125	1	20	
Calcium	7.88	0.500	0.0311	mg/L	1.0000	8.90	NR	75-125	22	20	QM-02, QR-03
Chromium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125	0.6	20	
Cobalt	0.0984	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	3	20	
Copper	0.0997	0.0050	0.0005	mg/L	0.10000	ND	100	75-125	0.3	20	
Lead	0.0959	0.0050	0.0001	mg/L	0.10000	ND	96	75-125	0.2	20	
Molybdenum	0.0991	0.0100	0.0017	mg/L	0.10000	ND	99	75-125	3	20	
Nickel	0.103	0.0050	0.0006	mg/L	0.10000	0.0042	99	75-125	0.6	20	
Selenium	0.104	0.0100	0.0010	mg/L	0.10000	ND	104	75-125	4	20	
Silver	0.0963	0.0050	0.0005	mg/L	0.10000	ND	96	75-125	4	20	
Thallium	0.0952	0.0010	0.0002	mg/L	0.10000	ND	95	75-125	0.06	20	
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000	ND	103	75-125	0.6	20	
Zinc	0.106	0.0100	0.0021	mg/L	0.10000	0.0026	103	75-125	2	20	

PACE ANALYTICAL SERVICES, INC.

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(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090062 - EPA 3005A											
Matrix Spike Dup (6090062-MSD1)		**Source: AZI0050-04**				Prepared: 09/06/16 Analyzed: 09/07/16					
Lithium	0.0974	0.0500	0.0021	mg/L	0.10000	0.0044	93	75-125	5	20	
Post Spike (6090062-PS1)		**Source: AZI0050-04**				Prepared: 09/06/16 Analyzed: 09/07/16					
Antimony	99.5			ug/L	100.00	0.100	99	80-120			
Arsenic	112			ug/L	100.00	9.50	102	80-120			
Barium	159			ug/L	100.00	66.6	92	80-120			
Beryllium	91.8			ug/L	100.00	0.0195	92	80-120			
Boron	1120			ug/L	1000.0	349	77	80-120			QM-02
Cadmium	101			ug/L	100.00	-0.0066	101	80-120			
Calcium	9570			ug/L	1000.0	8900	67	80-120			QM-02
Chromium	104			ug/L	100.00	0.586	104	80-120			
Cobalt	100			ug/L	100.00	0.0381	100	80-120			
Copper	101			ug/L	100.00	0.224	101	80-120			
Lead	93.7			ug/L	100.00	0.0558	94	80-120			
Molybdenum	101			ug/L	100.00	0.0984	101	80-120			
Nickel	104			ug/L	100.00	4.21	100	80-120			
Selenium	104			ug/L	100.00	0.394	103	80-120			
Silver	94.0			ug/L	100.00	-0.000050	94	80-120			
Thallium	93.2			ug/L	100.00	0.0002	93	80-120			
Vanadium	107			ug/L	100.00	2.25	104	80-120			
Zinc	104			ug/L	100.00	2.61	102	80-120			
Lithium	97.5			ug/L	100.00	4.38	93	80-120			
Batch 6090078 - EPA 7470A											
Blank (6090078-BLK1)						Prepared & Analyzed: 09/06/16					
Mercury	ND	0.00050	0.000041	mg/L							

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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Report No.: AZI0050

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090078 - EPA 7470A											
LCS (6090078-BS1)						Prepared & Analyzed: 09/06/16					
Mercury	0.00241	0.00050	0.000041	mg/L	2.5000E-3		96	80-120			
Matrix Spike (6090078-MS1)			Source: AZI0038-05			Prepared & Analyzed: 09/06/16					
Mercury	0.00241	0.00050	0.000041	mg/L	2.5000E-3	ND	96	75-125			
Matrix Spike Dup (6090078-MSD1)			Source: AZI0038-05			Prepared & Analyzed: 09/06/16					
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3	ND	93	75-125	3	20	
Post Spike (6090078-PS1)			Source: AZI0038-05			Prepared & Analyzed: 09/06/16					
Mercury	1.69			ug/L	1.6667	0.00587	101	80-120			
Batch 6090123 - EPA 7470A											
Blank (6090123-BLK1)						Prepared & Analyzed: 09/07/16					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6090123-BS1)						Prepared & Analyzed: 09/07/16					
Mercury	0.00241	0.00050	0.000041	mg/L	2.5000E-3		97	80-120			
Matrix Spike (6090123-MS1)			Source: AZI0050-05			Prepared & Analyzed: 09/07/16					
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3	ND	94	75-125			
Matrix Spike Dup (6090123-MSD1)			Source: AZI0050-05			Prepared & Analyzed: 09/07/16					
Mercury	0.00230	0.00050	0.000041	mg/L	2.5000E-3	ND	92	75-125	2	20	
Post Spike (6090123-PS1)			Source: AZI0050-05			Prepared & Analyzed: 09/07/16					
Mercury	1.70			ug/L	1.6667	0.0134	101	80-120			

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Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 13, 2016

Legend

Definition of Laboratory Terms

ND - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

B-01 Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD

Pace Analytical® www.pacelabs.com

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1

CLIENT NAME: GEORGIA POWER

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 RALPH MCGILL BLVD SE B10185
ATLANTA, GA 30308
404-506-2239

REPORT TO: JOJU ABRAHAM

CC: MARIA PADILLA, HEATH MCCORKLE

REQUESTED COMPLETION DATE:

PO #: LABURCH@SOUTHERNCO.COM

PROJECT NAME/STATE: PLANT KRAFT AP

PROJECT #: PHASE 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	METALS APP III & IV (EPA 6020/7470)	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	RADIUM 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
	CONTAINER TYPE:						P	P	P	
	PRESERVATION:						3	7	3	
09/01/16	1430	GW		X	KMW-5	4	X	1	2	1
09/01/16	1630	GW		X	KMW-6	3	X	1	1	2
09/01/16	—	GW		X	DUP-1	3	X	1	1	3
09/01/16	1310	GW		X	KMW-2	3	X	1	1	4
09/01/16	1441	GW		X	KMW-7	3	X	1	1	5
09/01/16	1555	GW		X	KMW-1	3	X	1	1	6
09/01/16	1635	~~GW~~ FB		X	FBL090116	3	X	1	1	7
09/01/16	1645	~~GW~~ EB		X	EQBL090116	3	X	1	1	8

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤6°C
7 - ≤6°C not frozen

*MATRIX CODES:
DW - DRINKING WATER
WW - WASTEWATER
GW - GROUNDWATER
SW - SURFACE WATER
ST - STORM WATER
W - WATER
S - SOIL
SL - SLUDGE
SD - SOLID
A - AIR
L - LIQUID
P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

SAMPLED BY AND TITLE: FORREST HOWARD & MICHAEL PITTARD
DATE/TIME: 09/01/16

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME:

FOR LAB USE ONLY
LAB #: AZ10050
Entered Into LIMS: MR

RECEIVED BY LAB:
DATE/TIME: 09/02/16 0905

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Tracking #: 809523380650

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

COC Revised 2016-05-17.xlsx

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 9/13/2016 9:57:12AM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 09/02/16 09:05

Work Order: AZI0050
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 8 **#Containers:** 25

Minimum Temp(C): 1.0 **Maximum Temp(C):** 1.0 **Custody Seal(s) Used:** Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 04, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Kraft AP Phase 2 CCR
Pace Project No.: 30195127

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on September 06, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Kraft AP Phase 2 CCR
Pace Project No.: 30195127

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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Greensburg, PA 15601
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SAMPLE SUMMARY

Project: Plant Kraft AP Phase 2 CCR
Pace Project No.: 30195127

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30195127001	**KMW-5**	Water	09/01/16 14:30	09/06/16 08:50
30195127002	**KMW-6**	Water	09/01/16 16:30	09/06/16 08:50
30195127003	**DUP-1**	Water	09/01/16 00:01	09/06/16 08:50
30195127004	**KMW-2**	Water	09/01/16 13:10	09/06/16 08:50
30195127005	**KMW-7**	Water	09/01/16 14:41	09/06/16 08:50
30195127006	**KMW-1**	Water	09/01/16 15:55	09/06/16 08:50
30195127007	**FBL090116**	Water	09/01/16 16:35	09/06/16 08:50
30195127008	**EQBL090116**	Water	09/01/16 16:45	09/06/16 08:50

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: Plant Kraft AP Phase 2 CCR
Pace Project No.: 30195127

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30195127001	**KMW-5**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30195127002	**KMW-6**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30195127003	**DUP-1**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30195127004	**KMW-2**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30195127005	**KMW-7**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30195127006	**KMW-1**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30195127007	**FBL090116**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30195127008	**EQBL090116**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP Phase 2 CCR
Pace Project No.: 30195127

Sample: KMW-5 **Lab ID: 30195127001** Collected: 09/01/16 14:30 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.32 ± 0.356 (0.259) C:95% T:NA**	pCi/L	09/28/16 09:31	13982-63-3	
Radium-228	EPA 9320	**4.76 ± 1.10 (0.849) C:70% T:86%**	pCi/L	09/23/16 12:35	15262-20-1	
Total Radium	Total Radium Calculation	**6.08 ± 1.46 (1.11)**	pCi/L	10/04/16 15:09	7440-14-4	

Sample: KMW-6 **Lab ID: 30195127002** Collected: 09/01/16 16:30 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.349 ± 0.164 (0.212) C:89% T:NA**	pCi/L	09/28/16 09:31	13982-63-3	
Radium-228	EPA 9320	**3.96 ± 0.993 (0.939) C:66% T:81%**	pCi/L	09/23/16 12:36	15262-20-1	
Total Radium	Total Radium Calculation	**4.31 ± 1.16 (1.15)**	pCi/L	10/04/16 15:09	7440-14-4	

Sample: DUP-1 **Lab ID: 30195127003** Collected: 09/01/16 00:01 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.23 ± 0.333 (0.234) C:90% T:NA**	pCi/L	09/28/16 09:32	13982-63-3	
Radium-228	EPA 9320	**5.10 ± 1.19 (0.942) C:68% T:79%**	pCi/L	09/23/16 12:36	15262-20-1	
Total Radium	Total Radium Calculation	**6.33 ± 1.52 (1.18)**	pCi/L	10/04/16 15:09	7440-14-4	

Sample: KMW-2 **Lab ID: 30195127004** Collected: 09/01/16 13:10 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.479 ± 0.203 (0.220) C:81% T:NA**	pCi/L	09/28/16 09:32	13982-63-3	
Radium-228	EPA 9320	**0.915 ± 0.553 (1.04) C:73% T:74%**	pCi/L	09/23/16 12:36	15262-20-1	
Total Radium	Total Radium Calculation	**1.39 ± 0.756 (1.26)**	pCi/L	10/04/16 15:09	7440-14-4	

Sample: KMW-7 **Lab ID: 30195127005** Collected: 09/01/16 14:41 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.47 ± 0.367 (0.216) C:82% T:NA**	pCi/L	09/28/16 09:32	13982-63-3	
Radium-228	EPA 9320	**5.79 ± 1.29 (0.860) C:67% T:84%**	pCi/L	09/23/16 12:37	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP Phase 2 CCR
Pace Project No.: 30195127

Sample: KMW-7 **Lab ID: 30195127005** Collected: 09/01/16 14:41 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**7.26 ± 1.66 (1.08)**	pCi/L	10/04/16 15:09	7440-14-4	

Sample: KMW-1 **Lab ID: 30195127006** Collected: 09/01/16 15:55 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.72 ± 0.393 (0.217) C:89% T:NA**	pCi/L	09/28/16 09:32	13982-63-3	
Radium-228	EPA 9320	**5.68 ± 1.30 (0.915) C:70% T:71%**	pCi/L	09/23/16 12:37	15262-20-1	
Total Radium	Total Radium Calculation	**7.40 ± 1.69 (1.13)**	pCi/L	10/04/16 15:09	7440-14-4	

Sample: FBL090116 **Lab ID: 30195127007** Collected: 09/01/16 16:35 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0477 ± 0.108 (0.254) C:94% T:NA**	pCi/L	09/28/16 09:32	13982-63-3	
Radium-228	EPA 9320	**0.514 ± 0.389 (0.760) C:77% T:77%**	pCi/L	09/23/16 12:37	15262-20-1	
Total Radium	Total Radium Calculation	**0.562 ± 0.497 (1.01)**	pCi/L	10/04/16 15:09	7440-14-4	

Sample: EQBL090116 **Lab ID: 30195127008** Collected: 09/01/16 16:45 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0134 ± 0.0866 (0.227) C:85% T:NA**	pCi/L	09/28/16 09:32	13982-63-3	
Radium-228	EPA 9320	**0.770 ± 0.468 (0.866) C:72% T:76%**	pCi/L	09/23/16 12:39	15262-20-1	
Total Radium	Total Radium Calculation	**0.783 ± 0.555 (1.09)**	pCi/L	10/04/16 15:09	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft AP Phase 2 CCR
Pace Project No.: 30195127

QC Batch: 232984 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30195127001, 30195127002, 30195127003, 30195127004, 30195127005, 30195127006, 30195127007, 30195127008

METHOD BLANK: 1141814 Matrix: Water
Associated Lab Samples: 30195127001, 30195127002, 30195127003, 30195127004, 30195127005, 30195127006, 30195127007, 30195127008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.756 ± 0.402 (0.705) C:77% T:82%	pCi/L	09/23/16 12:40	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft AP Phase 2 CCR
Pace Project No.: 30195127

QC Batch: 232978 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30195127001, 30195127002, 30195127003, 30195127004, 30195127005, 30195127006, 30195127007, 30195127008

METHOD BLANK: 1141797 Matrix: Water
Associated Lab Samples: 30195127001, 30195127002, 30195127003, 30195127004, 30195127005, 30195127006, 30195127007, 30195127008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0236 ± 0.0605 (0.149) C:91% T:NA	pCi/L	09/28/16 09:31	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Kraft AP Phase 2 CCR
Pace Project No.: 30195127

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30195127001

[1] The sampler's signature and the relinquished by not listed on the COC.

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WO#:30195127

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30
(770) 734-4200 : FAX (770) 734-4201

30195127

CLIENT NAME: GEORGIA POWER

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 RALPH MCGILL BLVD SE B10185
ATLANTA, GA 30308
404-506-7239

REPORT TO: JOJO ABRAHAM
CC: MARIA PADILLA, HEATH MCCORKLE

REQUESTED COMPLETION DATE:
PO #: LABURCH@SOUTHERNCO.COM

PROJECT NAME/STATE: PLANT KRAFT AP

PROJECT #: PHASE 2 CCR

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	METALS APP. III & IV CCR 6020/7470	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER
CONTAINER TYPE:							P	P	P							
PRESERVATION:							3	7	3							
09/01/16	1430	GW		X	KMW-5	4	X	1	2							001
09/01/16	1630	GW		X	KMW-6	3	X	1	1							002
09/01/16	—	GW		X	DUP-1	3	X	1	1							003
09/01/16	1310	GW		X	KMW-2	3	X	1	1							004
09/01/16	1441	GW		X	KMW-7	3	X	1	1							005
09/01/16	1555	GW		X	KMW-1	3	X	1	1							006
09/01/16	1635	~~GW~~ FB		X	FBL090116	3	X	1	1							007
09/01/16	1645	~~GW~~ EB		X	EQBL090116	3	X	1	1							008

ANALYSIS REQUESTED

CONTAINER TYPE	CONTAINER TYPE	PRESERVATION
	P - PLASTIC	1 - HCl, ≤6°C
	A - AMBER GLASS	2 - H_2SO_4, ≤6°C
	G - CLEAR GLASS	3 - HNO_3
	V - VOA VIAL	4 - NaOH, ≤6°C
	S - STERILE	5 - NaOH/ZnAc, ≤6°C
	O - OTHER	6 - $Na_2S_2O_3$, ≤6°C
		7 - ≤6°C not frozen

*MATRIX CODES:

DW -	DRINKING WATER	S -	SOIL
WW -	WASTEWATER	SL -	SLUDGE
GW -	GROUNDWATER	SD -	SOLID
SW -	SURFACE WATER	A -	AIR
ST -	STORM WATER	L -	LIQUID
W -	WATER	P -	PRODUCT

REMARKS/ADDITIONAL INFORMATION

SAMPLED BY AND TITLE: FORTRESS HOWARD & MICHAEL PITMAN
DATE/TIME: 09/01/16

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY: Dawn Ford Pace
DATE/TIME: 9-6-16 08:50

RELINQUISHED BY:
DATE/TIME:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:

RECEIVED BY LAB:
DATE/TIME:

SAMPLE SHIPPED VIA:
UPS FED-EX USPS COURIER CLIENT OTHER FS

Tracking #:

pH checked: (Yes) No NA
Ice: Yes (No) NA
Temperature: Min: Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

30195127

Client Name: Pace, GA Project #

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 6812 5098 8849

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 09R 9-6-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X	X		3.
Sampler Name & Signature on COC:		X		4. No Signature
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed 09R Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:		X		15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: 09R Date: 9-6-16

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	9/23/2016
Worklist:	31360
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1141797
MB concentration:	0.024
M/B Counting Uncertainty:	0.060
MB MDC:	0.149
MB Numerical Performance Indicator:	0.77
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS31360	LCSD31360
Count Date:	9/28/2016	
Spike I.D.:	16-026	
Spike Concentration (pCi/mL):	44.677	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.529	
Target Conc. (pCi/L, g, F):	8.452	
Uncertainty (Calculated):	0.398	
Result (pCi/L, g, F):	7.327	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.605	
Numerical Performance Indicator:	-3.05	
Percent Recovery:	86.68%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30195127001	
Duplicate Sample I.D.	30195127001DUP	
Sample Result (pCi/L, g, F):	1.317	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.301	
Sample Duplicate Result (pCi/L, g, F):	1.390	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.315	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.329	30195127001
Duplicate RPD:	5.40%	30195127001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

10/4/16

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	9/15/2016
Worklist:	31365
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1141814
MB concentration:	0.756
M/B Counting Uncertainty:	0.379
MB MDC:	0.705
MB Numerical Performance Indicator:	3.91
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS31365	LCSD31365
Count Date:	9/23/2016	
Spike I.D.:	16-025	
Spike Concentration (pCi/mL):	25.599	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.809	
Target Conc. (pCi/L, g, F):	6.329	
Uncertainty (Calculated):	0.456	
Result (pCi/L, g, F):	7.473	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.849	
Numerical Performance Indicator:	2.33	
Percent Recovery:	118.07%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30195127001	
Duplicate Sample I.D.	30195127001DUP	
Sample Result (pCi/L, g, F):	4.765	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.691	
Sample Duplicate Result (pCi/L, g, F):	5.113	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.692	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.699	30195127001
Duplicate RPD:	7.06%	30195127001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

Georgia Power
2480 Maner Road
Atlanta, GA 30339

Attention: Mr. Joju Abraham

Report Number: AAB0005
February 09, 2017
Project: CCR Event
Project #:Plant Kraft

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

Project Manager

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All test results relate only to the samples analyzed.

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 09, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
KMW-06	AAB0005-01	Ground Water	01/31/17 09:32	02/01/17 09:20
KMW-05	AAB0005-02	Ground Water	01/31/17 10:30	02/01/17 09:20
EQBL-013117	AAB0005-03	Water	01/31/17 18:10	02/01/17 09:20
FBL-013117	AAB0005-04	Water	01/31/17 18:00	02/01/17 09:20

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 09, 2017

Report No.: AAB0005
Client ID: KMW-06
Date/Time Sampled: 1/31/2017 9:32:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAB0005-01
Date/Time Received: 2/1/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	3820	25	10	mg/L	SM 2540 C		1	02/03/17 11:35	02/03/17 11:35	7020078	JPT
Inorganic Anions											
Chloride	2000	25	1.3	mg/L	EPA 300.0	B-01	100	02/04/17 11:15	02/07/17 08:41	7020101	RLC
Fluoride	1.3	0.30	0.004	mg/L	EPA 300.0		1	02/04/17 11:15	02/04/17 23:37	7020101	RLC
Sulfate	2600	100	9.2	mg/L	EPA 300.0	B-01	100	02/04/17 11:15	02/07/17 08:41	7020101	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Arsenic	0.0041	0.0050	0.0016	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Barium	0.0314	0.0100	0.0004	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Beryllium	0.0028	0.0030	0.00008	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Boron	0.922	0.0400	0.0064	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Calcium	161	25.0	1.55	mg/L	EPA 6020B		50	02/02/17 15:00	02/06/17 21:18	7020031	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Cobalt	0.0075	0.0100	0.0005	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Selenium	0.0110	0.0100	0.0010	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Thallium	0.0003	0.0010	0.0002	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Lithium	0.0479	0.0500	0.0021	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:12	7020031	KLH
Mercury	0.000065	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	02/06/17 12:45	02/06/17 17:17	7020113	MTC

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 09, 2017

Report No.: AAB0005
Client ID: KMW-05
Date/Time Sampled: 1/31/2017 10:30:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAB0005-02
Date/Time Received: 2/1/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	3830	25	10	mg/L	SM 2540 C		1	02/03/17 11:35	02/03/17 11:35	7020078	JPT
Inorganic Anions											
Chloride	1900	25	1.3	mg/L	EPA 300.0	B-01	100	02/04/17 11:15	02/07/17 09:02	7020101	RLC
Fluoride	0.11	0.30	0.004	mg/L	EPA 300.0	J	1	02/04/17 11:15	02/05/17 00:39	7020101	RLC
Sulfate	530	100	9.2	mg/L	EPA 300.0	B-01	100	02/04/17 11:15	02/07/17 09:02	7020101	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Arsenic	0.0062	0.0050	0.0016	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Barium	0.0445	0.0100	0.0004	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Beryllium	0.0011	0.0030	0.00008	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Boron	0.784	0.400	0.0642	mg/L	EPA 6020B		10	02/02/17 15:00	02/07/17 13:47	7020031	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Calcium	159	25.0	1.55	mg/L	EPA 6020B		50	02/02/17 15:00	02/07/17 13:41	7020031	KLH
Chromium	0.0015	0.0100	0.0009	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Cobalt	0.0111	0.0100	0.0005	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Lead	0.0004	0.0050	0.0001	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Selenium	0.0046	0.0100	0.0010	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Thallium	0.0004	0.0010	0.0002	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Lithium	0.0124	0.0500	0.0021	mg/L	EPA 6020B	J	1	02/02/17 15:00	02/06/17 21:35	7020031	KLH
Mercury	0.00012	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	02/06/17 12:45	02/06/17 17:19	7020113	MTC

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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 09, 2017

Report No.: AAB0005
Client ID: EQBL-013117
Date/Time Sampled: 1/31/2017 6:10:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAB0005-03
Date/Time Received: 2/1/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	02/03/17 18:20	02/03/17 18:20	7020170	JPT
Inorganic Anions											
Chloride	0.06	0.25	0.01	mg/L	EPA 300.0	B-01, J	1	02/04/17 11:15	02/05/17 02:23	7020101	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	02/04/17 11:15	02/05/17 02:23	7020101	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	02/04/17 11:15	02/05/17 02:23	7020101	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:47	7020031	KLH
Mercury	0.00006	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	02/06/17 12:45	02/06/17 17:21	7020113	MTC

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2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 09, 2017

Report No.: AAB0005
Client ID: FBL-013117
Date/Time Sampled: 1/31/2017 6:00:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAB0005-04
Date/Time Received: 2/1/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	02/03/17 11:35	02/03/17 11:35	7020078	JPT
Inorganic Anions											
Chloride	0.08	0.25	0.01	mg/L	EPA 300.0	B-01, J	1	02/04/17 11:15	02/05/17 02:43	7020101	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	02/04/17 11:15	02/05/17 02:43	7020101	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	02/04/17 11:15	02/05/17 02:43	7020101	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	02/02/17 15:00	02/06/17 21:52	7020031	KLH
Mercury	0.00007	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	02/06/17 12:45	02/06/17 17:24	7020113	MTC

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Attention: Mr. Joju Abraham

February 09, 2017

Report No.: AAB0005

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020078 - SM 2540 C											
Blank (7020078-BLK1)						Prepared & Analyzed: 02/03/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7020078-BS1)						Prepared & Analyzed: 02/03/17					
Total Dissolved Solids	413	25	10	mg/L	400.00		103	84-108			
Duplicate (7020078-DUP1)			**Source: AAB0005-02**			Prepared & Analyzed: 02/03/17					
Total Dissolved Solids	3840	25	10	mg/L		3830			0.3	10	
Duplicate (7020078-DUP2)			**Source: AAB0021-07**			Prepared & Analyzed: 02/03/17					
Total Dissolved Solids	14	25	10	mg/L		18			25	10	QR-01, J
Batch 7020170 - SM 2540 C											
Blank (7020170-BLK1)						Prepared & Analyzed: 02/07/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7020170-BS1)						Prepared & Analyzed: 02/07/17					
Total Dissolved Solids	384	25	10	mg/L	400.00		96	84-108			
Duplicate (7020170-DUP1)			**Source: AAA0992-05RE2**			Prepared & Analyzed: 02/07/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7020170-DUP2)			**Source: AAB0005-03RE1**			Prepared & Analyzed: 02/07/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7020170-DUP3)			**Source: AAB0021-08RE1**			Prepared & Analyzed: 02/07/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	

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Attention: Mr. Joju Abraham

February 09, 2017

Report No.: AAB0005

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020101 - EPA 300.0											
Blank (7020101-BLK1)						Prepared & Analyzed: 02/04/17					
Chloride	0.07	0.25	0.01	mg/L							J
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	0.26	1.0	0.09	mg/L							J
LCS (7020101-BS1)						Prepared & Analyzed: 02/04/17					
Chloride	10.9	0.25	0.01	mg/L	10.010		109	90-110			
Fluoride	10.8	0.30	0.004	mg/L	10.020		108	90-110			
Sulfate	10.8	1.0	0.09	mg/L	10.020		107	90-110			
Matrix Spike (7020101-MS1)		**Source: AAB0005-01**				Prepared & Analyzed: 02/04/17					
Chloride	235	0.25	0.01	mg/L	10.010	271	NR	90-110			QM-02
Fluoride	13.2	0.30	0.004	mg/L	10.020	1.33	119	90-110			QM-05
Sulfate	300	1.0	0.09	mg/L	10.020	312	NR	90-110			QM-02
Matrix Spike (7020101-MS2)		**Source: AAB0020-02**				Prepared: 02/04/17 Analyzed: 02/05/17					
Chloride	13.0	0.25	0.01	mg/L	10.010	2.45	106	90-110			
Fluoride	11.2	0.30	0.004	mg/L	10.020	0.04	111	90-110			QM-05
Sulfate	23.5	1.0	0.09	mg/L	10.020	12.8	107	90-110			
Matrix Spike Dup (7020101-MSD1)		**Source: AAB0005-01**				Prepared: 02/04/17 Analyzed: 02/05/17					
Chloride	237	0.25	0.01	mg/L	10.010	271	NR	90-110	0.9	15	QM-02
Fluoride	13.0	0.30	0.004	mg/L	10.020	1.33	117	90-110	1	15	QM-05
Sulfate	300	1.0	0.09	mg/L	10.020	312	NR	90-110	0.05	15	QM-02

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Report No.: AAB0005

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020031 - EPA 3005A											
Blank (7020031-BLK1)						Prepared: 02/02/17 Analyzed: 02/06/17					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (7020031-BS1)						Prepared: 02/02/17 Analyzed: 02/06/17					
Antimony	0.109	0.0030	0.0008	mg/L	0.10000		109	80-120			
Arsenic	0.0939	0.0050	0.0016	mg/L	0.10000		94	80-120			
Barium	0.100	0.0100	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.106	0.0030	0.00008	mg/L	0.10000		106	80-120			
Boron	1.04	0.0400	0.0064	mg/L	1.0000		104	80-120			
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000		103	80-120			
Calcium	1.08	0.500	0.0311	mg/L	1.0000		108	80-120			
Chromium	0.0944	0.0100	0.0009	mg/L	0.10000		94	80-120			
Cobalt	0.0926	0.0100	0.0005	mg/L	0.10000		93	80-120			
Copper	0.0923	0.0250	0.0005	mg/L	0.10000		92	80-120			
Lead	0.0998	0.0050	0.0001	mg/L	0.10000		100	80-120			
Molybdenum	0.106	0.0100	0.0017	mg/L	0.10000		106	80-120			
Nickel	0.0923	0.0100	0.0006	mg/L	0.10000		92	80-120			
Selenium	0.0967	0.0100	0.0010	mg/L	0.10000		97	80-120			
Silver	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Thallium	0.102	0.0010	0.0002	mg/L	0.10000		102	80-120			
Vanadium	0.0930	0.0100	0.0071	mg/L	0.10000		93	80-120			
Zinc	0.0947	0.0100	0.0021	mg/L	0.10000		95	80-120			
Lithium	0.109	0.0500	0.0021	mg/L	0.10000		109	80-120			

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Report No.: AAB0005

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020031 - EPA 3005A											
Matrix Spike (7020031-MS1)		**Source: AAB0005-02**				Prepared: 02/02/17 Analyzed: 02/06/17					
Antimony	0.107	0.0030	0.0008	mg/L	0.10000	ND	107	75-125			
Arsenic	0.107	0.0050	0.0016	mg/L	0.10000	0.0062	101	75-125			
Barium	0.154	0.0100	0.0004	mg/L	0.10000	0.0445	110	75-125			
Beryllium	0.0874	0.0030	0.00008	mg/L	0.10000	0.0011	86	75-125			
Boron	1.47	0.0400	0.0064	mg/L	1.0000	0.784	68	75-125			QM-02
Cadmium	0.0936	0.0010	0.00007	mg/L	0.10000	ND	94	75-125			
Calcium	157	25.0	1.55	mg/L	1.0000	159	NR	75-125			QM-02
Chromium	0.103	0.0100	0.0009	mg/L	0.10000	0.0015	102	75-125			
Cobalt	0.105	0.0100	0.0005	mg/L	0.10000	0.0111	94	75-125			
Copper	0.0818	0.0250	0.0005	mg/L	0.10000	ND	82	75-125			
Lead	0.0981	0.0050	0.0001	mg/L	0.10000	0.0004	98	75-125			
Molybdenum	0.109	0.0100	0.0017	mg/L	0.10000	ND	109	75-125			
Nickel	0.141	0.0100	0.0006	mg/L	0.10000	0.0510	90	75-125			
Selenium	0.103	0.0100	0.0010	mg/L	0.10000	0.0046	98	75-125			
Silver	0.0842	0.0100	0.0005	mg/L	0.10000	ND	84	75-125			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000	0.0004	100	75-125			
Vanadium	0.108	0.0100	0.0071	mg/L	0.10000	ND	108	75-125			
Zinc	0.115	0.0100	0.0021	mg/L	0.10000	0.0291	86	75-125			
Lithium	0.102	0.0500	0.0021	mg/L	0.10000	0.0124	90	75-125			
Matrix Spike Dup (7020031-MSD1)		**Source: AAB0005-02**				Prepared: 02/02/17 Analyzed: 02/06/17					
Antimony	0.111	0.0030	0.0008	mg/L	0.10000	ND	111	75-125	3	20	
Arsenic	0.108	0.0050	0.0016	mg/L	0.10000	0.0062	102	75-125	0.7	20	
Barium	0.156	0.0100	0.0004	mg/L	0.10000	0.0445	112	75-125	1	20	
Beryllium	0.0884	0.0030	0.00008	mg/L	0.10000	0.0011	87	75-125	1	20	
Boron	1.49	0.0400	0.0064	mg/L	1.0000	0.784	71	75-125	1	20	QM-02
Cadmium	0.0967	0.0010	0.00007	mg/L	0.10000	ND	97	75-125	3	20	
Calcium	160	25.0	1.55	mg/L	1.0000	159	47	75-125	2	20	QM-02
Chromium	0.101	0.0100	0.0009	mg/L	0.10000	0.0015	100	75-125	2	20	
Cobalt	0.108	0.0100	0.0005	mg/L	0.10000	0.0111	97	75-125	2	20	
Copper	0.0839	0.0250	0.0005	mg/L	0.10000	ND	84	75-125	3	20	
Lead	0.103	0.0050	0.0001	mg/L	0.10000	0.0004	103	75-125	5	20	
Molybdenum	0.113	0.0100	0.0017	mg/L	0.10000	ND	113	75-125	4	20	
Nickel	0.140	0.0100	0.0006	mg/L	0.10000	0.0510	89	75-125	0.6	20	
Selenium	0.102	0.0100	0.0010	mg/L	0.10000	0.0046	97	75-125	1	20	
Silver	0.0860	0.0100	0.0005	mg/L	0.10000	ND	86	75-125	2	20	
Thallium	0.106	0.0010	0.0002	mg/L	0.10000	0.0004	106	75-125	6	20	
Vanadium	0.109	0.0100	0.0071	mg/L	0.10000	ND	109	75-125	0.7	20	
Zinc	0.116	0.0100	0.0021	mg/L	0.10000	0.0291	87	75-125	0.9	20	
Lithium	0.108	0.0500	0.0021	mg/L	0.10000	0.0124	96	75-125	6	20	

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 09, 2017

Report No.: AAB0005

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020031 - EPA 3005A											
Post Spike (7020031-PS1)		**Source: AAB0005-02**				Prepared: 02/02/17 Analyzed: 02/06/17					
Antimony	107			ug/L	100.00	0.251	107	80-120			
Arsenic	106			ug/L	100.00	6.23	100	80-120			
Barium	144			ug/L	100.00	44.5	99	80-120			
Beryllium	92.1			ug/L	100.00	1.07	91	80-120			
Boron	1570			ug/L	1000.0	784	78	80-120			QM-02
Cadmium	96.7			ug/L	100.00	0.0292	97	80-120			
Calcium	168000			ug/L	1000.0	159000	844	80-120			QM-02
Chromium	102			ug/L	100.00	1.46	101	80-120			
Cobalt	105			ug/L	100.00	11.1	94	80-120			
Copper	82.9			ug/L	100.00	0.0687	83	80-120			
Lead	101			ug/L	100.00	0.371	101	80-120			
Molybdenum	111			ug/L	100.00	0.775	111	80-120			
Nickel	142			ug/L	100.00	51.0	91	80-120			
Selenium	100			ug/L	100.00	4.64	96	80-120			
Silver	83.1			ug/L	100.00	0.0177	83	80-120			
Thallium	105			ug/L	100.00	0.381	105	80-120			
Vanadium	110			ug/L	100.00	0.647	110	80-120			
Zinc	118			ug/L	100.00	29.1	89	80-120			
Lithium	108			ug/L	100.00	12.4	95	80-120			
Batch 7020113 - EPA 7470A											
Blank (7020113-BLK1)						Prepared & Analyzed: 02/06/17					
Mercury	0.00007	0.00050	0.000041	mg/L							J
LCS (7020113-BS1)						Prepared & Analyzed: 02/06/17					
Mercury	0.00238	0.00050	0.000041	mg/L	2.5000E-3		95	80-120			

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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 09, 2017

Report No.: AAB0005

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020113 - EPA 7470A											
Matrix Spike (7020113-MS1)		**Source: AAA0956-04**				Prepared & Analyzed: 02/06/17					
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3	0.00006	91	75-125			
Matrix Spike Dup (7020113-MSD1)		**Source: AAA0956-04**				Prepared & Analyzed: 02/06/17					
Mercury	0.00235	0.00050	0.000041	mg/L	2.5000E-3	0.00006	92	75-125	0.7	20	
Post Spike (7020113-PS1)		**Source: AAA0956-04**				Prepared & Analyzed: 02/06/17					
Mercury	1.72			ug/L	1.6667	0.0422	101	80-120			

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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 09, 2017

Legend

Definition of Laboratory Terms

ND - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

QR-01 RPD was outside acceptance limits due to sample concentrations near or below the reporting limit.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

B-01 Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD

Pace Analytical® www.pacelabs.com
Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1

CLIENT NAME: SOUTHERN COMPANY SERVICES

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 RALPH MCGILL BLVD SE B10185
ATLANTA, GA 30308
404. 506. 7239

REPORT TO: LAUREN PETTY
CC: STEPHEN.WILSON@RESOLUTEFP.COM; MICHAEL.PATINKIN@RESOLUTEFP.COM

REQUESTED COMPLETION DATE:
PO #: LAPETTY@SOUTHERNCO.COM

PROJECT NAME/STATE: PLANT KRAFT

PROJECT #: GPC CCR KRAFT

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		ANALYSIS REQUESTED: METALS APP. III & IV (EPA 6020 / 7470)	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	RADIUM 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
01/31/17	0932	GW		X	KMW-06	4	4	1	1	2	1	1 COOLER
01/31/17	1030	GW		X	KMW-05	4	4	1	1	2	2	
01/31/17	1810	W		X	FRBL-013117	4		1	1	2	3	
01/31/17	1800	W		X	FBL-013117	4		1	1	2	4	
												→ (MD) 01/31/17

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER
PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤6°C; 7 - ≤6°C not frozen

*MATRIX CODES: DW - DRINKING WATER; WW - WASTEWATER; GW - GROUNDWATER; SW - SURFACE WATER; ST - STORM WATER; W - WATER; S - SOIL; SL - SLUDGE; SD - SOLID; A - AIR; L - LIQUID; P - PRODUCT

SAMPLED BY AND TITLE: MICHAEL FORREST HOWARD & PATINKIN
DATE/TIME: 01/31/17 ~~1605~~ (MD) 1830
RELINQUISHED BY:
DATE/TIME: 01/31/17 1830 ~~1605~~ (MD)

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

FOR LAB USE ONLY
LAB #: AA30005
Entered into LIMS: MB

RECEIVED BY LAB: Lalman
DATE/TIME: 02/01/17 0920
Temperature: 1°C Min: 1°C Max:
Iced: Yes No NA
Custody Seal: Intact Broken Not Present
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
# of Coolers
Cooler ID:
Tracking #: 785469427606

PACE ANALYTICAL SERVICES, LLC.

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(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 2/1/2017 1:39:27PM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 02/01/17 09:20

Work Order: AAB0005
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 4 **#Containers:** 16

Minimum Temp(C): 1.0 **Maximum Temp(C):** 1.0 **Custody Seal(s) Used:** Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

February 27, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Kraft
Pace Project No.: 30209603

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Kraft
Pace Project No.: 30209603

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Plant Kraft
Pace Project No.: 30209603

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30209603001	**KMW-06**	Water	01/31/17 09:32	02/02/17 10:05
30209603002	**KMW-05**	Water	01/31/17 10:30	02/02/17 10:05
30209603003	**EQBL013117**	Water	01/31/17 18:10	02/02/17 10:05
30209603004	**FBL013117**	Water	01/31/17 18:00	02/02/17 10:05

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SAMPLE ANALYTE COUNT

Project: Plant Kraft
Pace Project No.: 30209603

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30209603001	**KMW-06**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30209603002	**KMW-05**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30209603003	**EQBL013117**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30209603004	**FBL013117**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 30209603

Sample: KMW-06 **Lab ID: 30209603001** Collected: 01/31/17 09:32 Received: 02/02/17 10:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.24 ± 0.475 (0.160) C:97% T:NA**	pCi/L	02/15/17 08:20	13982-63-3	
Radium-228	EPA 9320	**5.41 ± 1.16 (0.655) C:77% T:86%**	pCi/L	02/23/17 11:40	15262-20-1	
Total Radium	Total Radium Calculation	**6.90 ± 1.48 (0.762)**	pCi/L	02/23/17 16:09	7440-14-4	

Sample: KMW-05 **Lab ID: 30209603002** Collected: 01/31/17 10:30 Received: 02/02/17 10:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.39 ± 0.332 (0.157) C:104% T:NA**	pCi/L	02/15/17 08:20	13982-63-3	
Radium-228	EPA 9320	**4.41 ± 1.01 (0.736) C:75% T:82%**	pCi/L	02/23/17 11:40	15262-20-1	
Total Radium	Total Radium Calculation	**5.80 ± 1.34 (0.893)**	pCi/L	02/23/17 16:09	7440-14-4	

Sample: EQBL013117 **Lab ID: 30209603003** Collected: 01/31/17 18:10 Received: 02/02/17 10:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0262 ± 0.136 (0.358) C:86% T:NA**	pCi/L	02/15/17 09:33	13982-63-3	
Radium-228	EPA 9320	**0.792 ± 0.540 (1.02) C:52% T:77%**	pCi/L	02/23/17 11:47	15262-20-1	
Total Radium	Total Radium Calculation	**0.818 ± 0.676 (1.38)**	pCi/L	02/24/17 16:21	7440-14-4	

Sample: FBL013117 **Lab ID: 30209603004** Collected: 01/31/17 18:00 Received: 02/02/17 10:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**-0.108 ± 0.158 (0.512) C:80% T:NA**	pCi/L	02/15/17 09:03	13982-63-3	
Radium-228	EPA 9320	**1.14 ± 0.676 (1.27) C:50% T:82%**	pCi/L	02/23/17 11:37	15262-20-1	
Total Radium	Total Radium Calculation	**1.14 ± 0.834 (1.78)**	pCi/L	02/24/17 16:21	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 30209603

QC Batch: 248965 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30209603003, 30209603004

METHOD BLANK: 1224567 Matrix: Water
Associated Lab Samples: 30209603003, 30209603004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0945 ± 0.388 (0.887) C:53% T:83%	pCi/L	02/23/17 11:46	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 30209603

QC Batch: 248824 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30209603001, 30209603002

METHOD BLANK: 1223623 Matrix: Water
Associated Lab Samples: 30209603001, 30209603002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00454 ± 0.0688 (0.190) C:100% T:NA	pCi/L	02/14/17 10:56	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 30209603

QC Batch: 248899 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30209603001, 30209603002

METHOD BLANK: 1224049 Matrix: Water
Associated Lab Samples: 30209603001, 30209603002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.991 ± 0.451 (0.731) C:88% T:66%	pCi/L	02/23/17 12:11	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 30209603

QC Batch: 248825 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30209603003, 30209603004

METHOD BLANK: 1223624 Matrix: Water
Associated Lab Samples: 30209603003, 30209603004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0911 ± 0.153 (0.342) C:91% T:NA	pCi/L	02/15/17 09:03	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Kraft
Pace Project No.: 30209603

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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WO# : 30209603

30209603

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAB0005 Workorder Name: Plant Kraft Owner Received Date: Results Requested By: 2/24/2017

Report To:	Subcontract To:
Betsy McDaniel	Pace - Pittsburgh
Pace Analytical Atlanta	1638 Roseytown Road
110 Technology Parkway	Stes. 2,3,4
Peachtree Corners, GA 30092	Greensburg, PA 15601
Phone (770)-734-4200	Phone (724) 850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3					Requested Analysis Radium 226, 228, Total												LAB USE ONLY
1	KMW-06	G	1/31/2017 9:32	AAB0005-01	GW	2					X												001
2	KMW-05	G	1/31/2017 10:30	AAB0005-02	GW	2					X												002
3	EQBL013117	G	1/31/2017 18:10	AAB0005-03	W	2					X												003
4	FBL013117	G	1/31/2017 18:00	AAB0005-04	W	2					X												004
5																							
6																							
7																							
8																							
9																							
10																							

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Ashley Rose Pace	2-2-17/1005	
2					
3					

Cooler Temperature on Receipt N/A °C	Custody Seal Y or N	Received on Ice Y or N	Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

30209603

9763

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1

CLIENT NAME: SOUTHERN COMPANY SERVICES

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 RALPH MCGILL BLVD SE 810185
ATLANTA, GA 30308
404.506.7239

REPORT TO: LAUREN PETTY

CC: STEPHEN.WILSON@RESOLUTE-FP.COM; MICHAEL.PATINKIN@RESOLUTE-FP.COM

REQUESTED COMPLETION DATE:

PO #: LMBURCH@SOUTHERNCO.COM

PROJECT NAME/STATE: PLANT KRAFT

PROJECT #: GPC CCR KRAFT

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals ABF. III & IV (EPA 6020 / 7470)	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
						CONTAINER TYPE:	P	P	P	
						PRESERVATION:	3	7	3	
01/31/17	0932	GW		X	KMW-06	4	1	1	2	1
01/31/17	1030	GW		X	KMW-05	4	1	1	2	2
01/31/17	1810	W		X	FRBL-013117	4	1	1	2	3
01/31/17	1800	W		X	FBL-013117	4	1	1	2	4

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤6°C; 7 - ≤6°C not frozen

*MATRIX CODES:
DW - DRINKING WATER; WW - WASTEWATER; GW - GROUNDWATER; SW - SURFACE WATER; ST - STORM WATER; W - WATER; S - SOIL; SL - SLUDGE; SD - SOLID; A - AIR; L - LIQUID; P - PRODUCT

REMARKS/ADDITIONAL INFORMATION
1 COOLER
(MS) 01/31/17

SAMPLED BY AND TITLE: MICHAEL FORREST HOWARD & PATINKIN

DATE/TIME: 01/31/17 1830

RELINQUISHED BY:

DATE/TIME: 01/31/17 1830

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

FOR LAB USE ONLY
LAB #: ATA0005
Entered Into LIMS: MS

RECEIVED BY/LAB: MZaiman

DATE/TIME: 02/01/17 0920

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Tracking #: 785469427606

pH checked: Yes No NA

Ice: Yes No NA

Temperature: 1°C Min: 1°C Max:

Custody Seal: Intact Broken Not Present

# of Coolers

Cooler ID:

COC Revised 2016-05-17.xlsx

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace, GA Project # 30209603

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 6812 5102 0454

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp ___ °C Correction Factor: ___ °C Final Temp: ___ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AGR 2-2-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.	X			15. pH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed AGR Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed AGR Date: 2-2-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	2/13/2017
Worklist:	33965
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1224049
MB concentration:	0.991
M/B Counting Uncertainty:	0.414
MB MDC:	0.731
MB Numerical Performance Indicator:	4.69
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS33965	LCSD33965
Count Date:	2/23/2017	
Spike I.D.:	16-027	
Spike Concentration (pCi/mL):	25.228	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.810	
Target Conc. (pCi/L, g, F):	6.231	
Uncertainty (Calculated):	0.449	
Result (pCi/L, g, F):	8.243	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.828	
Numerical Performance Indicator:	4.19	
Percent Recovery:	132.29%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30209600005	
Duplicate Sample I.D.	30209600005DUP	
Sample Result (pCi/L, g, F):	1.345	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.471	
Sample Duplicate Result (pCi/L, g, F):	0.855	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.393	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.566	30209600005
Duplicate RPD:	44.56%	30209600005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*The method blank result is below the reporting limit for this analysis and is acceptable.

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	2/10/2017
Worklist:	33939
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1223623
MB concentration:	0.005
M/B Counting Uncertainty:	0.069
MB MDC:	0.190
MB Numerical Performance Indicator:	0.13
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS33939	LCSD33939
Count Date:	2/15/2017	
Spike I.D.:	16-026	
Spike Concentration (pCi/mL):	44.669	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	8.890	
Uncertainty (Calculated):	0.418	
Result (pCi/L, g, F):	7.727	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.653	
Numerical Performance Indicator:	-2.94	
Percent Recovery:	86.93%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment

Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment

Sample I.D.:	30209600005
Duplicate Sample I.D.	30209600005DUP
Sample Result (pCi/L, g, F):	0.111
Sample Result Counting Uncertainty (pCi/L, g, F):	0.096
Sample Duplicate Result (pCi/L, g, F):	0.064
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.096
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.680
Duplicate RPD:	54.03%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30209600005
30209600005DUP

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: JLW
Date: 2/15/2017
Worklist: 33968
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1224567
MB concentration:	0.094
M/B Counting Uncertainty:	0.387
MB MDC:	0.887
MB Numerical Performance Indicator:	0.48
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)? LCS33968	N LCSD33968
Count Date:	2/23/2017	
Spike I.D.:	16-027	
Spike Concentration (pCi/mL):	25.228	
Volume Used (mL):	0.30	
Aliquot Volume (L, g, F):	0.802	
Target Conc. (pCi/L, g, F):	9.439	
Uncertainty (Calculated):	0.680	
Result (pCi/L, g, F):	8.775	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.867	
Numerical Performance Indicator:	-1.18	
Percent Recovery:	92.97%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30209606003	
Duplicate Sample I.D.	30209606003DUP	
Sample Result (pCi/L, g, F):	0.702	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.483	
Sample Duplicate Result (pCi/L, g, F):	1.313	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.568	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.606	30209606003
Duplicate RPD:	60.66%	30209606003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

***Batch must be re-prepped due to unacceptable precision.

2/24/17

Quality Control Sample Performance Assessment

Test: Ra-226
Analyst: LAL
Date: 2/14/2017
Worklist: 33940
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1223624
MB concentration:	0.091
M/B Counting Uncertainty:	0.153
MB MDC:	0.342
MB Numerical Performance Indicator:	1.17
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS33940	LCSD33940
Count Date:	2/15/2017	
Spike I.D.:	16-026	
Spike Concentration (pCi/mL):	44.669	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.506	
Target Conc. (pCi/L, g, F):	8.835	
Uncertainty (Calculated):	0.416	
Result (pCi/L, g, F):	7.810	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.845	
Numerical Performance Indicator:	-2.13	
Percent Recovery:	88.39%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment

Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment

Sample I.D.:	30209606003
Duplicate Sample I.D.	30209606003DUP
Sample Result (pCi/L, g, F):	0.326
Sample Result Counting Uncertainty (pCi/L, g, F):	0.256
Sample Duplicate Result (pCi/L, g, F):	0.234
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.182
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.569
Duplicate RPD:	32.60%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30209606003
30209606003DUP

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

***Batch must be re-prepped due to unacceptable precision.

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

Georgia Power
2480 Maner Road
Atlanta, GA 30339

Attention: Mr. Joju Abraham

Report Number: AAA0956
February 07, 2017
Project: CCR Event
Project #:Plant Kraft

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 07, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
KMW-07	AAA0956-01	Ground Water	01/30/17 16:33	01/31/17 09:25
Dup-01	AAA0956-02	Ground Water	01/30/17 00:00	01/31/17 09:25
KMW-02	AAA0956-03	Ground Water	01/30/17 15:30	01/31/17 09:25
KMW-01	AAA0956-04	Ground Water	01/30/17 15:00	01/31/17 09:25

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 07, 2017

Report No.: AAA0956
Client ID: KMW-07
Date/Time Sampled: 1/30/2017 4:33:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0956-01
Date/Time Received: 1/31/2017 9:25:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	2080	25	10	mg/L	SM 2540 C		1	02/02/17 12:10	02/02/17 12:10	7020046	JPT
Inorganic Anions											
Chloride	1000	25	1.3	mg/L	EPA 300.0		100	01/31/17 09:35	02/04/17 08:13	7010769	RLC
Fluoride	0.99	0.30	0.004	mg/L	EPA 300.0		1	01/31/17 09:35	01/31/17 20:39	7010769	RLC
Sulfate	400	100	9.2	mg/L	EPA 300.0		100	01/31/17 09:35	02/04/17 08:13	7010769	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Arsenic	0.0063	0.0050	0.0016	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Barium	0.0437	0.0100	0.0004	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Beryllium	0.0011	0.0030	0.00008	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/03/17 14:22	7020013	KLH
Boron	0.763	0.0400	0.0064	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Calcium	36.0	2.50	0.155	mg/L	EPA 6020B	B-01	5	02/01/17 15:35	02/03/17 14:28	7020013	KLH
Chromium	0.0018	0.0100	0.0009	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Cobalt	0.0015	0.0100	0.0005	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Lead	0.0003	0.0050	0.0001	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Selenium	0.0165	0.0100	0.0010	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Lithium	0.0043	0.0500	0.0021	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 20:35	7020013	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/02/17 12:05	02/02/17 17:24	7020032	MTC

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 07, 2017

Report No.: AAA0956
Client ID: Dup-01
Date/Time Sampled: 1/30/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0956-02
Date/Time Received: 1/31/2017 9:25:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	267	25	10	mg/L	SM 2540 C		1	02/02/17 12:10	02/02/17 12:10	7020046	JPT
Inorganic Anions											
Chloride	83	2.5	0.13	mg/L	EPA 300.0		10	01/31/17 09:35	02/04/17 08:35	7010769	RLC
Fluoride	0.16	0.30	0.004	mg/L	EPA 300.0	J	1	01/31/17 09:35	01/31/17 22:24	7010769	RLC
Sulfate	80	10	0.92	mg/L	EPA 300.0		10	01/31/17 09:35	02/04/17 08:35	7010769	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Arsenic	0.0385	0.0050	0.0016	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Barium	0.0548	0.0100	0.0004	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	02/01/17 15:35	02/03/17 14:34	7020013	KLH
Boron	0.469	0.0400	0.0064	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Calcium	6.48	0.500	0.0311	mg/L	EPA 6020B	B-01	1	02/01/17 15:35	02/03/17 14:34	7020013	KLH
Chromium	0.0018	0.0100	0.0009	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Selenium	0.0014	0.0100	0.0010	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Lithium	0.0034	0.0500	0.0021	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 20:47	7020013	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/02/17 12:05	02/02/17 17:26	7020032	MTC

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Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 07, 2017

Report No.: AAA0956
Client ID: KMW-02
Date/Time Sampled: 1/30/2017 3:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0956-03
Date/Time Received: 1/31/2017 9:25:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	259	25	10	mg/L	SM 2540 C		1	02/02/17 12:10	02/02/17 12:10	7020046	JPT
Inorganic Anions											
Chloride	82	2.5	0.13	mg/L	EPA 300.0		10	01/31/17 09:35	02/04/17 08:57	7010769	RLC
Fluoride	0.13	0.30	0.004	mg/L	EPA 300.0	J	1	01/31/17 09:35	01/31/17 22:44	7010769	RLC
Sulfate	80	10	0.92	mg/L	EPA 300.0		10	01/31/17 09:35	02/04/17 08:57	7010769	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Arsenic	0.0374	0.0050	0.0016	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Barium	0.0530	0.0100	0.0004	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	02/01/17 15:35	02/03/17 14:58	7020013	KLH
Boron	0.460	0.0400	0.0064	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Calcium	6.66	0.500	0.0311	mg/L	EPA 6020B	B-01	1	02/01/17 15:35	02/03/17 14:58	7020013	KLH
Chromium	0.0017	0.0100	0.0009	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Lithium	0.0033	0.0500	0.0021	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 20:58	7020013	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/02/17 12:05	02/02/17 17:29	7020032	MTC

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Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 07, 2017

Report No.: AAA0956
Client ID: KMW-01
Date/Time Sampled: 1/30/2017 3:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0956-04
Date/Time Received: 1/31/2017 9:25:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	2850	25	10	mg/L	SM 2540 C		1	02/02/17 12:10	02/02/17 12:10	7020046	JPT
Inorganic Anions											
Chloride	1500	25	1.3	mg/L	EPA 300.0		100	01/31/17 09:35	02/04/17 09:18	7010769	RLC
Fluoride	0.65	0.30	0.004	mg/L	EPA 300.0		1	01/31/17 09:35	01/31/17 23:05	7010769	RLC
Sulfate	320	100	9.2	mg/L	EPA 300.0		100	01/31/17 09:35	02/04/17 09:18	7010769	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Arsenic	0.0073	0.0050	0.0016	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Barium	0.0448	0.0100	0.0004	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Beryllium	0.0032	0.0030	0.00008	mg/L	EPA 6020B		1	02/01/17 15:35	02/03/17 15:10	7020013	KLH
Boron	1.06	0.0400	0.0064	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Cadmium	0.0002	0.0010	0.00007	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Calcium	127	25.0	1.55	mg/L	EPA 6020B	B-01	50	02/01/17 15:35	02/03/17 15:15	7020013	KLH
Chromium	0.0032	0.0100	0.0009	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Cobalt	0.0248	0.0100	0.0005	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Lead	0.0014	0.0050	0.0001	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Selenium	0.0092	0.0100	0.0010	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Thallium	0.0008	0.0010	0.0002	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Lithium	0.0178	0.0500	0.0021	mg/L	EPA 6020B	J	1	02/01/17 15:35	02/02/17 21:10	7020013	KLH
Mercury	0.00006	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	02/06/17 12:45	02/06/17 16:46	7020113	MTC

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February 07, 2017

Report No.: AAA0956

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020046 - SM 2540 C											
Blank (7020046-BLK1)						Prepared & Analyzed: 02/02/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7020046-BS1)						Prepared & Analyzed: 02/02/17					
Total Dissolved Solids	374	25	10	mg/L	400.00		94	84-108			
Duplicate (7020046-DUP1)		**Source: AAA0992-05**				Prepared & Analyzed: 02/02/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	

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February 07, 2017

Report No.: AAA0956

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010769 - EPA 300.0											
Blank (7010769-BLK1)						Prepared & Analyzed: 01/31/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7010769-BS1)						Prepared & Analyzed: 01/31/17					
Chloride	10.4	0.25	0.01	mg/L	10.010		104	90-110			
Fluoride	10.4	0.30	0.004	mg/L	10.020		104	90-110			
Sulfate	10.3	1.0	0.09	mg/L	10.020		103	90-110			
Matrix Spike (7010769-MS1)		**Source: AAA0909-02**				Prepared & Analyzed: 01/31/17					
Chloride	16.6	0.25	0.01	mg/L	10.010	6.98	96	90-110			
Fluoride	11.1	0.30	0.004	mg/L	10.020	0.29	108	90-110			
Sulfate	82.2	1.0	0.09	mg/L	10.020	80.8	14	90-110			QM-02
Matrix Spike (7010769-MS2)		**Source: AAA0909-10**				Prepared & Analyzed: 01/31/17					
Chloride	147	0.25	0.01	mg/L	10.010	153	NR	90-110			QM-02
Fluoride	14.4	0.30	0.004	mg/L	10.020	0.71	137	90-110			QM-05
Sulfate	413	1.0	0.09	mg/L	10.020	438	NR	90-110			QM-02
Matrix Spike Dup (7010769-MSD1)		**Source: AAA0909-02**				Prepared & Analyzed: 01/31/17					
Chloride	16.7	0.25	0.01	mg/L	10.010	6.98	97	90-110	0.08	15	
Fluoride	11.2	0.30	0.004	mg/L	10.020	0.29	109	90-110	0.3	15	
Sulfate	82.3	1.0	0.09	mg/L	10.020	80.8	15	90-110	0.1	15	QM-02

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Report No.: AAA0956

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020013 - EPA 3005A											
Blank (7020013-BLK1)						Prepared: 02/01/17 Analyzed: 02/02/17					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	0.125	0.500	0.0311	mg/L							J
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	0.0044	0.0100	0.0021	mg/L							J
Lithium	ND	0.0500	0.0021	mg/L							
LCS (7020013-BS1)						Prepared: 02/01/17 Analyzed: 02/02/17					
Antimony	0.110	0.0030	0.0008	mg/L	0.10000		110	80-120			
Arsenic	0.107	0.0050	0.0016	mg/L	0.10000		107	80-120			
Barium	0.101	0.0100	0.0004	mg/L	0.10000		101	80-120			
Beryllium	0.106	0.0030	0.00008	mg/L	0.10000		106	80-120			
Boron	1.07	0.0400	0.0064	mg/L	1.0000		107	80-120			
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000		103	80-120			
Calcium	1.12	0.500	0.0311	mg/L	1.0000		112	80-120			
Chromium	0.118	0.0100	0.0009	mg/L	0.10000		118	80-120			
Cobalt	0.109	0.0100	0.0005	mg/L	0.10000		109	80-120			
Copper	0.109	0.0250	0.0005	mg/L	0.10000		109	80-120			
Lead	0.104	0.0050	0.0001	mg/L	0.10000		104	80-120			
Molybdenum	0.106	0.0100	0.0017	mg/L	0.10000		106	80-120			
Nickel	0.112	0.0100	0.0006	mg/L	0.10000		112	80-120			
Selenium	0.113	0.0100	0.0010	mg/L	0.10000		113	80-120			
Silver	0.104	0.0100	0.0005	mg/L	0.10000		104	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.115	0.0100	0.0071	mg/L	0.10000		115	80-120			
Zinc	0.114	0.0100	0.0021	mg/L	0.10000		114	80-120			
Lithium	0.104	0.0500	0.0021	mg/L	0.10000		104	80-120			

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Report No.: AAA0956

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020013 - EPA 3005A											
Matrix Spike (7020013-MS1)		**Source: AAA0909-01**			Prepared: 02/01/17 Analyzed: 02/02/17						
Antimony	0.115	0.0030	0.0008	mg/L	0.10000	ND	115	75-125			
Arsenic	0.116	0.0050	0.0016	mg/L	0.10000	ND	116	75-125			
Barium	0.255	0.0100	0.0004	mg/L	0.10000	0.142	113	75-125			
Beryllium	0.0906	0.0030	0.00008	mg/L	0.10000	ND	91	75-125			
Boron	2.88	0.0400	0.0064	mg/L	1.0000	1.87	102	75-125			
Cadmium	0.100	0.0010	0.00007	mg/L	0.10000	ND	100	75-125			
Calcium	184	25.0	1.55	mg/L	1.0000	175	853	75-125			QM-02
Chromium	0.117	0.0100	0.0009	mg/L	0.10000	ND	117	75-125			
Cobalt	0.111	0.0100	0.0005	mg/L	0.10000	0.0006	110	75-125			
Copper	0.104	0.0250	0.0005	mg/L	0.10000	ND	104	75-125			
Lead	0.0977	0.0050	0.0001	mg/L	0.10000	0.0001	98	75-125			
Molybdenum	0.141	0.0100	0.0017	mg/L	0.10000	0.0234	118	75-125			
Nickel	0.112	0.0100	0.0006	mg/L	0.10000	0.0009	111	75-125			
Selenium	0.112	0.0100	0.0010	mg/L	0.10000	ND	112	75-125			
Silver	0.0985	0.0100	0.0005	mg/L	0.10000	ND	98	75-125			
Thallium	0.0988	0.0010	0.0002	mg/L	0.10000	ND	99	75-125			
Vanadium	0.119	0.0100	0.0071	mg/L	0.10000	ND	119	75-125			
Zinc	0.110	0.0100	0.0021	mg/L	0.10000	0.0055	104	75-125			
Lithium	0.0974	0.0500	0.0021	mg/L	0.10000	0.0042	93	75-125			
Matrix Spike Dup (7020013-MSD1)		**Source: AAA0909-01**			Prepared: 02/01/17 Analyzed: 02/02/17						
Antimony	0.112	0.0030	0.0008	mg/L	0.10000	ND	112	75-125	3	20	
Arsenic	0.116	0.0050	0.0016	mg/L	0.10000	ND	116	75-125	0.5	20	
Barium	0.242	0.0100	0.0004	mg/L	0.10000	0.142	101	75-125	5	20	
Beryllium	0.0921	0.0030	0.00008	mg/L	0.10000	ND	92	75-125	2	20	
Boron	2.91	0.0400	0.0064	mg/L	1.0000	1.87	104	75-125	0.7	20	
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	ND	102	75-125	1	20	
Calcium	189	25.0	1.55	mg/L	1.0000	175	NR	75-125	3	20	QM-02
Chromium	0.115	0.0100	0.0009	mg/L	0.10000	ND	115	75-125	2	20	
Cobalt	0.110	0.0100	0.0005	mg/L	0.10000	0.0006	109	75-125	1	20	
Copper	0.102	0.0250	0.0005	mg/L	0.10000	ND	102	75-125	1	20	
Lead	0.0986	0.0050	0.0001	mg/L	0.10000	0.0001	98	75-125	0.9	20	
Molybdenum	0.132	0.0100	0.0017	mg/L	0.10000	0.0234	108	75-125	7	20	
Nickel	0.108	0.0100	0.0006	mg/L	0.10000	0.0009	107	75-125	4	20	
Selenium	0.115	0.0100	0.0010	mg/L	0.10000	ND	115	75-125	2	20	
Silver	0.0962	0.0100	0.0005	mg/L	0.10000	ND	96	75-125	2	20	
Thallium	0.0985	0.0010	0.0002	mg/L	0.10000	ND	98	75-125	0.3	20	
Vanadium	0.116	0.0100	0.0071	mg/L	0.10000	ND	116	75-125	2	20	
Zinc	0.111	0.0100	0.0021	mg/L	0.10000	0.0055	105	75-125	0.7	20	
Lithium	0.101	0.0500	0.0021	mg/L	0.10000	0.0042	97	75-125	4	20	

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 07, 2017

Report No.: AAA0956

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020013 - EPA 3005A											
Post Spike (7020013-PS1)			**Source: AAA0909-01**			Prepared: 02/01/17 Analyzed: 02/02/17					
Antimony	104			ug/L	100.00	0.572	103	80-120			
Arsenic	118			ug/L	100.00	0.952	117	80-120			
Barium	249			ug/L	100.00	142	107	80-120			
Beryllium	89.5			ug/L	100.00	0.0129	89	80-120			
Boron	2800			ug/L	1000.0	1870	93	80-120			
Cadmium	101			ug/L	100.00	0.0242	101	80-120			
Calcium	180000			ug/L	1000.0	175000	432	80-120			QM-02
Chromium	119			ug/L	100.00	0.0861	118	80-120			
Cobalt	109			ug/L	100.00	0.595	108	80-120			
Copper	105			ug/L	100.00	0.484	105	80-120			
Lead	98.5			ug/L	100.00	0.122	98	80-120			
Molybdenum	134			ug/L	100.00	23.4	110	80-120			
Nickel	109			ug/L	100.00	0.947	109	80-120			
Selenium	117			ug/L	100.00	0.426	116	80-120			
Silver	94.8			ug/L	100.00	0.0211	95	80-120			
Thallium	100			ug/L	100.00	0.0533	100	80-120			
Vanadium	121			ug/L	100.00	-0.716	121	80-120			
Zinc	111			ug/L	100.00	5.50	105	80-120			
Lithium	98.7			ug/L	100.00	4.24	94	80-120			
Batch 7020032 - EPA 7470A											
Blank (7020032-BLK1)						Prepared & Analyzed: 02/02/17					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7020032-BS1)						Prepared & Analyzed: 02/02/17					
Mercury	0.00252	0.00050	0.000041	mg/L	2.5000E-3		101	80-120			

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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 07, 2017

Report No.: AAA0956

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020032 - EPA 7470A											
Matrix Spike (7020032-MS1)			**Source: AAA0909-10**			Prepared & Analyzed: 02/02/17					
Mercury	0.00253	0.00050	0.000041	mg/L	2.5000E-3	0.00008	98	75-125			
Matrix Spike Dup (7020032-MSD1)			**Source: AAA0909-10**			Prepared & Analyzed: 02/02/17					
Mercury	0.00249	0.00050	0.000041	mg/L	2.5000E-3	0.00008	96	75-125	2	20	
Post Spike (7020032-PS1)			**Source: AAA0909-10**			Prepared & Analyzed: 02/02/17					
Mercury	1.67			ug/L	1.6667	0.0534	97	80-120			
Batch 7020113 - EPA 7470A											
Blank (7020113-BLK1)						Prepared & Analyzed: 02/06/17					
Mercury	0.00007	0.00050	0.000041	mg/L							J
LCS (7020113-BS1)						Prepared & Analyzed: 02/06/17					
Mercury	0.00238	0.00050	0.000041	mg/L	2.5000E-3		95	80-120			
Matrix Spike (7020113-MS1)			**Source: AAA0956-04**			Prepared & Analyzed: 02/06/17					
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3	0.00006	91	75-125			
Matrix Spike Dup (7020113-MSD1)			**Source: AAA0956-04**			Prepared & Analyzed: 02/06/17					
Mercury	0.00235	0.00050	0.000041	mg/L	2.5000E-3	0.00006	92	75-125	0.7	20	
Post Spike (7020113-PS1)			**Source: AAA0956-04**			Prepared & Analyzed: 02/06/17					
Mercury	1.72			ug/L	1.6667	0.0422	101	80-120			

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Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

February 07, 2017

Legend

Definition of Laboratory Terms

ND - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

B-01 Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com
Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

CLIENT NAME: SOUTHERN COMPANY SERVICES

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 RALPH MCGILL BLVD SE B10185
ATLANTA, GA 30308
404.506.7239

REPORT TO: LAUREN PETTA

CC: STEPHEN.WILSON@RESOLUTE
MICHAEL.PATRICK@CFAUTILITY

REQUESTED COMPLETION DATE:

PO #: 1 COM
LDBURCH@SOUTHERNCO.COM

PROJECT NAME/STATE: PLANT KRAFT

PROJECT #: GPC CCR KRAFT

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		METALS AGR. III & IV (EPA 6020 / 7470)	CL, F, SO4 & TDS (EPA 300.0 & SM 2540C)	RADIUM 226 & 228 (SW-846 9315 / 9320)									LAB ID NUMBER
CONTAINER TYPE:						P		P	P	P									
PRESERVATION:						5		7	7	5									
01/30/17	1633	GW		X	KMW-07	4	2	1	1	2									1
01/30/17	—	GW		X	DUP-01	4	2	1	1	2									2
01/30/17	1530	GW		X	KMW-02	6	2	1	1	4									3
01/30/17	1500	GW		X	KMW-01	4	2	1	1	2									4

ANALYSIS REQUESTED

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_4, ≤6°C
G - CLEAR GLASS	3 - HNO_3
V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	6 - $Na_2S_2O_3$, ≤6°C
	7 - ≤6°C not frozen

*MATRIX CODES:

DW -	DRINKING WATER	S -	SOIL
WW -	WASTEWATER	SL -	SLUDGE
GW -	GROUNDWATER	SD -	SOLID
SW -	SURFACE WATER	A -	AIR
ST -	STORM WATER	L -	LIQUID
W -	WATER	P -	PRODUCT

REMARKS/ADDITIONAL INFORMATION

1 COOLER

SAMPLED BY AND TITLE: MICHAEL FORREST HOWARD / PATRICK
DATE/TIME: 01/30/17 17:30
RELINQUISHED BY:
DATE/TIME: 01/30/17 17:30

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

FOR LAB USE ONLY
LAB #: AAA09956
Entered into LIMS: MR

RECEIVED BY/LAB: Lalrman
DATE/TIME: 01/31/17 0925
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Tracking #: 7854 5543 4417

Checked: No NA
Ice: Yes No NA
Temperature: 1° Min: 1°C Max: 1°C
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 2/1/2017 1:16:45PM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 01/31/17 09:25

Work Order: AAA0956
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 4 **#Containers:** 18

Minimum Temp(C): 1.0 **Maximum Temp(C):** 1.0 **Custody Seal(s) Used:** Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

February 27, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Kraft
Pace Project No.: 30209606

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Kraft
Pace Project No.: 30209606

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Plant Kraft
Pace Project No.: 30209606

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30209606001	**KMW-07**	Water	01/30/17 16:33	02/02/17 10:05
30209606002	**Dup-01**	Water	01/30/17 00:00	02/02/17 10:05
30209606003	**KMW-02**	Water	01/30/17 15:30	02/02/17 10:05
30209606004	**KMW-01**	Water	01/30/17 15:00	02/02/17 10:05

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SAMPLE ANALYTE COUNT

Project: Plant Kraft
Pace Project No.: 30209606

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30209606001	**KMW-07**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30209606002	**Dup-01**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30209606003	**KMW-02**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30209606004	**KMW-01**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 30209606

Sample: KMW-07 **Lab ID: 30209606001** Collected: 01/30/17 16:33 Received: 02/02/17 10:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.92 ± 0.531 (0.311) C:86% T:NA**	pCi/L	02/15/17 10:11	13982-63-3	
Radium-228	EPA 9320	**4.29 ± 1.05 (0.940) C:61% T:91%**	pCi/L	02/23/17 16:15	15262-20-1	
Total Radium	Total Radium Calculation	**6.21 ± 1.58 (1.25)**	pCi/L	02/24/17 16:21	7440-14-4	

Sample: Dup-01 **Lab ID: 30209606002** Collected: 01/30/17 00:00 Received: 02/02/17 10:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.382 ± 0.229 (0.313) C:86% T:NA**	pCi/L	02/15/17 10:11	13982-63-3	
Radium-228	EPA 9320	**0.236 ± 0.514 (1.14) C:52% T:77%**	pCi/L	02/23/17 15:49	15262-20-1	
Total Radium	Total Radium Calculation	**0.618 ± 0.743 (1.45)**	pCi/L	02/24/17 16:21	7440-14-4	

Sample: KMW-02 **Lab ID: 30209606003** Collected: 01/30/17 15:30 Received: 02/02/17 10:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.326 ± 0.261 (0.477) C:81% T:NA**	pCi/L	02/15/17 10:11	13982-63-3	
Radium-228	EPA 9320	**0.702 ± 0.499 (0.962) C:58% T:78%**	pCi/L	02/23/17 11:47	15262-20-1	
Total Radium	Total Radium Calculation	**1.03 ± 0.760 (1.44)**	pCi/L	02/24/17 16:21	7440-14-4	

Sample: KMW-01 **Lab ID: 30209606004** Collected: 01/30/17 15:00 Received: 02/02/17 10:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.37 ± 0.608 (0.312) C:84% T:NA**	pCi/L	02/15/17 10:11	13982-63-3	
Radium-228	EPA 9320	**9.08 ± 1.81 (0.546) C:73% T:88%**	pCi/L	02/23/17 11:47	15262-20-1	
Total Radium	Total Radium Calculation	**11.5 ± 2.42 (0.858)**	pCi/L	02/24/17 16:21	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 30209606

QC Batch: 248965 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30209606001, 30209606002, 30209606003, 30209606004

METHOD BLANK: 1224567 Matrix: Water
Associated Lab Samples: 30209606001, 30209606002, 30209606003, 30209606004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0945 ± 0.388 (0.887) C:53% T:83%	pCi/L	02/23/17 11:46	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 30209606

QC Batch: 248825 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30209606001, 30209606002, 30209606003, 30209606004

METHOD BLANK: 1223624 Matrix: Water
Associated Lab Samples: 30209606001, 30209606002, 30209606003, 30209606004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0911 ± 0.153 (0.342) C:91% T:NA	pCi/L	02/15/17 09:03	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Kraft
Pace Project No.: 30209606

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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WO#:30209606

30209606

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAA0956 Workorder Name: Plant Kraft Owner Received Date: Results Requested By: 2/24/2017

Report To:	Subcontract To:
Betsy McDaniel	Pace - Pittsburgh
Pace Analytical Atlanta	1638 Roseytown Road
110 Technology Parkway	Stes. 2,3,4
Peachtree Corners, GA 30092	Greensburg, PA 15601
Phone (770)-734-4200	Phone (724) 850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	KMW-07	G	1/30/2017 16:33	AAA0956-01	GW	2	X	001
2	Dup-01	G	1/30/2017 0:00	AAA0956-02	GW	2	X	002
3	KMW-02	G	1/30/2017 15:30	AAA0956-03	GW	4	X	003
4	KMW-01	G	1/30/2017 15:00	AAA0956-04	GW	2	X	004
5								
6								
7								
8								
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Ashley Hoe/Pace	2-2-17/1005	
2					
3					

Cooler Temperature on Receipt NA °C | **Custody Seal Y or (N)** | **Received on Ice Y or (N)** | **Sample Intact (Y) or N**

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

30209606

9761

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1

CLIENT NAME: SOUTHERN COMPANY SERVICES

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 RALPH MCGILL BLVD SE B10185
ATLANTA, GA 30308
404.506.7239

REPORT TO: LAUREN PETTY

CC: STEPHEN.WILSON@RESOLUTE... MICHAEL.PATTERSON@RESOLUTE... ...COM
LAUREN.PETTY@SOUTHERNCO.COM

REQUESTED COMPLETION DATE:

PO #:

PROJECT NAME/STATE: PLANT KRAFT

PROJECT #: GPC CCR KRAFT

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	METALS AVR. III & IV (EPA 6020 / 7470)	CL, F, SO4 & TDS (EPA 300.0 & SM 2540C)	RADIUM 226 & 228 (GSW-846 9315/9320)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
01/30/17	1633	GW		X	KMW-07	4	1	1	2	1	1 COOLER
01/30/17	—	GW		X	DUP-01	4	1	1	2	2	
01/30/17	1530	GW		X	KMW-02	6	1	1	4	3	
01/30/17	1500	GW		X	KMW-01	4	1	1	2	4	

ANALYSIS REQUESTED

CONTAINER TYPE: P P P
PRESERVATION: 3 7 3

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_4, ≤6°C
G - CLEAR GLASS	3 - HNO_3
V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	6 - $Na_2S_2O_3$, ≤6°C
	7 - ≤6°C not frozen

*MATRIX CODES:

DW -	DRINKING WATER	S -	SOIL
WW -	WASTEWATER	SL -	SLUDGE
GW -	GROUNDWATER	SD -	SOLID
SW -	SURFACE WATER	A -	AIR
ST -	STORM WATER	L -	LIQUID
W -	WATER	P -	PRODUCT

SAMPLED BY AND TITLE: MICHAEL FORREST HOWARD / PATTERSON
DATE/TIME: 01/30/17 1730

RELINQUISHED BY:
DATE/TIME: 01/30/17 1730

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: Malman
DATE/TIME: 01/31/17 0925

SAMPLE SHIPPED VIA: UPS (FED-EX) USPS COURIER CLIENT OTHER FS

pH Checked: Yes No NA
Ice: Yes No NA
Temperature: 1° Min: 1° Max: 1°C 1°C

Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: KAA0956
Entered Into LIMS: MM
Tracking #: 785455443417

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace, GA Project # 30209606

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 6812 5102 0454

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp ____ °C Correction Factor: ____ °C Final Temp: ____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: QNR 2-2-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.	X			15. pH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed QNR Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed QNR Date: 2-2-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: JLW
Date: 2/15/2017
Worklist: 33968
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1224567
MB concentration:	0.094
M/B Counting Uncertainty:	0.387
MB MDC:	0.887
MB Numerical Performance Indicator:	0.48
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS33968	LCSD33968
Count Date:	2/23/2017	
Spike I.D.:	16-027	
Spike Concentration (pCi/mL):	25.228	
Volume Used (mL):	0.30	
Aliquot Volume (L, g, F):	0.802	
Target Conc. (pCi/L, g, F):	9.439	
Uncertainty (Calculated):	0.680	
Result (pCi/L, g, F):	8.775	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.867	
Numerical Performance Indicator:	-1.18	
Percent Recovery:	92.97%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment		
Sample I.D.:	30209606003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30209606003DUP	
Sample Result (pCi/L, g, F):	0.702	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.483	
Sample Duplicate Result (pCi/L, g, F):	1.313	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.568	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.606	30209606003
Duplicate RPD:	60.66%	30209606003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

***Batch must be re-prepped due to unacceptable precision.

LMK 2/24/17

Quality Control Sample Performance Assessment

Test: Ra-226
Analyst: LAL
Date: 2/14/2017
Worklist: 33940
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1223624
MB concentration:	0.091
M/B Counting Uncertainty:	0.153
MB MDC:	0.342
MB Numerical Performance Indicator:	1.17
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS33940	LCSD33940
Count Date:	2/15/2017	
Spike I.D.:	16-026	
Spike Concentration (pCi/mL):	44.669	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.506	
Target Conc. (pCi/L, g, F):	8.835	
Uncertainty (Calculated):	0.416	
Result (pCi/L, g, F):	7.810	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.845	
Numerical Performance Indicator:	-2.13	
Percent Recovery:	88.39%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment

Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment

Sample I.D.:	30209606003
Duplicate Sample I.D.	30209606003DUP
Sample Result (pCi/L, g, F):	0.326
Sample Result Counting Uncertainty (pCi/L, g, F):	0.256
Sample Duplicate Result (pCi/L, g, F):	0.234
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.182
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.569
Duplicate RPD:	32.60%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30209606003
30209606003DUP

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

***Batch must be re-prepped due to unacceptable precision.

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

July 26, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1707L12

Analytical Environmental Services, Inc. received 3 samples on 7/26/2017 10:20:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1707L12

Date: 7/25/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE B 10185 Atlanta GA 30308
PHONE: 770 296 9648
EMAIL: forrest.howard@RoyalTeenv.com
SAMPLED BY: Forrest Howard
SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes) N	CRA 6020 AS ONLY	REMARKS	Number of Containers
1	KMW-02@50	7/25/17	1142	X		GW	X	X		1
2	KMW-02@100	7/25/17	1203	X		GW	X	X		1
3	KMW-02@150	7/25/17	1228	X		GW	X	X		1
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	7/25/17 1730	1. Tofachex	7/26/17 10:30
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to Stephen Wilson, Trent Godwin, Forrest Howard, Lea Miller, Nick Beaman

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Porterwerth GA
SEND REPORT TO: In comments
INVOICE TO: (IF DIFFERENT FROM ABOVE) GPC Environmental Affairs
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 3

Turnaround Time (TAT) Request
☐ Standard 5 Business Days
☐ 2 Business Day Rush
☐ Next Business Day Rush
☒ Same-Day Rush (auth req.)
☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 26-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	KMW-02@50
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/25/2017 11:42:00 AM
Lab ID:	1707L12-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	30.0	5.00		ug/L	246018	1	07/26/2017 17:16	JR

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 26-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	KMW-02@100
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/25/2017 12:03:00 PM
Lab ID:	1707L12-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	31.1	5.00		ug/L	246018	1	07/26/2017 17:33	JR

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 26-Jul-17

Client:	Georgia Power Company	**Client Sample ID:**	KMW-02@150
Project Name:	Plant Kraft Excavation	**Collection Date:**	7/25/2017 12:28:00 PM
Lab ID:	1707L12-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	31.0	5.00		ug/L	246018	1	07/26/2017 17:37	JR

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GEORGIA POWER CO** AES Work Order Number: **1707L12**

2. Carrier: FedEx ☐ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	◉	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.9 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TH 7/26/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TH 7/26/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	◉	○	○		
29.	Containers meet preservation guidelines?	◉	○	○		
30.	Was pH adjusted at Sample Receipt?	○	◉	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TH 7/26/17

Checklist 6.9.17 Rev 2

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1707L12

ANALYTICAL QC SUMMARY REPORT

BatchID: 246018

Sample ID: **MB-246018**	Client ID:			Units: **ug/L**	Prep Date: **07/26/2017**	Run No: **348407**
SampleType: **MBLK**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **246018**	Analysis Date: **07/26/2017**	Seq No: **7653946**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	5.00									

Sample ID: **LCS-246018**	Client ID:			Units: **ug/L**	Prep Date: **07/26/2017**	Run No: **348407**
SampleType: **LCS**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **246018**	Analysis Date: **07/26/2017**	Seq No: **7653947**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	102.0	5.00	100.0		102	80	120				

Sample ID: **1707L12-001AMS**	Client ID: **KMW-02@50**			Units: **ug/L**	Prep Date: **07/26/2017**	Run No: **348407**
SampleType: **MS**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **246018**	Analysis Date: **07/26/2017**	Seq No: **7653949**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	125.0	5.00	100.0	29.98	95.1	75	125				

Sample ID: **1707L12-001AMSD**	Client ID: **KMW-02@50**			Units: **ug/L**	Prep Date: **07/26/2017**	Run No: **348407**
SampleType: **MSD**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **246018**	Analysis Date: **07/26/2017**	Seq No: **7653950**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	131.4	5.00	100.0	29.98	101	75	125	125.0	4.97	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

Georgia Power
42 Inverness Center Parkway
Birmingham, AL 35242

Attention: Ms. Lauren Petty

Report Number: AAG0396

July 25, 2017

Project: Georgia HSRA Program

Project #:Plant Kraft

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

Project Manager

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All test results relate only to the samples analyzed.

PACE ANALYTICAL SERVICES, LLC.

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110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

July 25, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
KMW-04	AAG0396-01	Ground Water	07/13/17 12:55	07/14/17 09:25

PACE ANALYTICAL SERVICES, LLC.

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Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

July 25, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.

PACE ANALYTICAL SERVICES, LLC.

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110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

July 25, 2017

Report No.: AAG0396
Client ID: KMW-04
Date/Time Sampled: 7/13/2017 12:55:00PM
Matrix: Ground Water

Project: Georgia HSRA Program
Lab Number ID: AAG0396-01
Date/Time Received: 7/14/2017 9:25:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Metals, Total											
Arsenic	0.0038	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 22:53	7070414	CSW

PACE ANALYTICAL SERVICES, LLC.

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(770) 734-4200 FAX (770) 734-4201

Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

July 25, 2017

Report No.: AAG0396

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070414 - EPA 3005A											
Blank (7070414-BLK1)						Prepared: 07/18/17 Analyzed: 07/20/17					
Arsenic	ND	0.0050	0.0005	mg/L							
LCS (7070414-BS1)						Prepared: 07/18/17 Analyzed: 07/20/17					
Arsenic	0.101	0.0050	0.0005	mg/L	0.10000		101	80-120			
Matrix Spike (7070414-MS1)		**Source: AAG0387-10**				Prepared: 07/18/17 Analyzed: 07/20/17					
Arsenic	0.106	0.0050	0.0005	mg/L	0.10000	0.0011	105	75-125			
Matrix Spike Dup (7070414-MSD1)		**Source: AAG0387-10**				Prepared: 07/18/17 Analyzed: 07/20/17					
Arsenic	0.104	0.0050	0.0005	mg/L	0.10000	0.0011	103	75-125	2	20	
Post Spike (7070414-PS1)		**Source: AAG0387-10**				Prepared: 07/18/17 Analyzed: 07/20/17					
Arsenic	104			ug/L	100.00	1.05	102	80-120			

PACE ANALYTICAL SERVICES, LLC.

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Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

July 25, 2017

Legend

Definition of Laboratory Terms

ND - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC - Atlanta GA
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1

CLIENT NAME: Georgia Power Company

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308

REPORT TO: Lauren Petty
CC: Stephen Wilson

REQUESTED COMPLETION DATE:
PO #: GPC 10684198

PROJECT NAME/STATE: Plant Kraft CCR

PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		CONTAINER TYPE	PRESERVATION									LAB ID NUMBER
7/13/17	1255	GW		X	KMW-04	3		P	3									1

ANALYSIS REQUESTED

CONTAINER TYPE:	P	P										
PRESERVATION:	3	3										
	EPA 6020 As only	Radium 226 + 228 SW-846 9315 + 9320										
	X	X										

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_4, ≤6°C
G - CLEAR GLASS	3 - HNO_3
V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	6 - $Na_2S_2O_3$, ≤6°C
	7 - ≤6°C not frozen

*MATRIX CODES:

DW - DRINKING WATER	S - SOIL
WW - WASTEWATER	SL - SLUDGE
GW - GROUNDWATER	SD - SOLID
SW - SURFACE WATER	A - AIR
ST - STORM WATER	L - LIQUID
W - WATER	P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

SAMPLED BY AND TITLE: Forrest Howard
DATE/TIME: 7/13/17 1500
RELINQUISHED BY:
DATE/TIME: 7/13/17 1730

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME: 7/14/17 0925

Checked: No NA
Logged: Yes No NA
Temperature: Min: 25.8°C Max:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Custody Seal: Intact Broken Not Present N/A
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: A60396
Entered into LIMS:
Tracking #: 787183703123

Page 7 of 9

Rev. 12/15/2016

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

Project # AAG0396

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 787183703123

Custody Seal on Cooler/Box Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used IR-1

Type of Ice: (Wet) Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature 25.8°C

Biological Tissue is Frozen: Yes (No)

Date and Initials of person examining contents: GH 7/14/17

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: _____		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 7/25/2017 1:59:58PM**

Attn: Ms. Lauren Petty

Client: Georgia Power
Project: Georgia HSRA Program
Date Received: 07/14/17 09:25

Work Order: AAG0396
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 1 **#Containers:** 3

Minimum Temp(C): 25.8 **Maximum Temp(C):** 25.8 **Custody Seal(s) Used:** Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	NO
Preservation Confirmed	YES

Comments:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 04, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAG0396 Plant Kraft
Pace Project No.: 30224383

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on July 17, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAG0396 Plant Kraft
Pace Project No.: 30224383

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAG0396 Plant Kraft
Pace Project No.: 30224383

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30224383001	**KMW-04**	Water	07/13/17 12:55	07/17/17 09:30

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SAMPLE ANALYTE COUNT

Project: AAG0396 Plant Kraft
Pace Project No.: 30224383

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30224383001	**KMW-04**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0396 Plant Kraft
Pace Project No.: 30224383

Sample: KMW-04 **Lab ID: 30224383001** Collected: 07/13/17 12:55 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.371 ± 0.164 (0.177) C:81% T:NA**	pCi/L	08/02/17 09:42	13982-63-3	
Radium-228	EPA 9320	**0.749 ± 0.398 (0.694) C:80% T:92%**	pCi/L	08/02/17 18:10	15262-20-1	
Total Radium	Total Radium Calculation	**1.12 ± 0.562 (0.871)**	pCi/L	08/04/17 12:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAG0396 Plant Kraft
Pace Project No.: 30224383

QC Batch: 265653 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30224383001

METHOD BLANK: 1308228 Matrix: Water
Associated Lab Samples: 30224383001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.302 ± 0.274 (0.549) C:82% T:85%	pCi/L	08/02/17 16:00	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAG0396 Plant Kraft
Pace Project No.: 30224383

QC Batch: 265657 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30224383001

METHOD BLANK: 1308239 Matrix: Water
Associated Lab Samples: 30224383001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.254 ± 0.116 (0.177) C:89% T:NA	pCi/L	08/01/17 19:52	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAG0396 Plant Kraft
Pace Project No.: 30224383

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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WO#:30224383

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAG0396 Workorder Name: Plant Kraft Owner Received Date: Results Requested By: 8/8/2017

Report To:	Subcontract To:
Betsy McDaniel	Pace - Pittsburgh
Pace Analytical Atlanta	1638 Roseytown Road
110 Technology Parkway	Stes. 2,3,4
Peachtree Corners, GA 30092	Greensburg, PA 15601
Phone (770)-734-4200	Phone (724) 850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	KMW-04	G	7/13/2017 12:55	AAG0396-01	GW	2	X	001
2								
3								
4								
5								
6								
7								
8								
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	Charles Hanks	7/14/17 0730	John Vanhouten/Pace	7-17-17 0930	
2					
3					

Cooler Temperature on Receipt N/A °C	Custody Seal Y or (N)	Received on Ice Y or (N)	Sample Intact (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Condition Upon Receipt 30224383

Pace Analytical

Client Name: GA Power Project # AG0396

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7871837 03123

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☐ yes ☐ no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used IR-1 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 25.8°C Biological Tissue is Frozen: Yes (No)

Date and Initials of person examining contents: 04-Apr-17 1/14/17

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALLC003rev.3, 11September2006

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace, GA Project # 30224383

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Label BLM

Tracking #: 7413 6657 2151 LIMS Login BLM

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☐ no

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp ___ °C Correction Factor: ___ °C Final Temp: ___ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AML 7-17-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used: -Pace Containers Used:	X			10.
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			15. pH<2 Initial when completed: AM Date/time of preservation: ___ Lot # of added preservative: ___
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: AM Date: 7-17-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	7/27/2017
Worklist:	36807
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1308239
MB concentration:	0.254
M/B Counting Uncertainty:	0.110
MB MDC:	0.177
MB Numerical Performance Indicator:	4.54
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS36807	LCSD36807
Count Date:	8/2/2017	
Spike I.D.:	17-030	
Spike Concentration (pCi/mL):	80.197	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.515	
Target Conc. (pCi/L, g, F):	15.579	
Uncertainty (Calculated):	1.435	
Result (pCi/L, g, F):	13.665	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.836	
Numerical Performance Indicator:	-2.26	
Percent Recovery:	87.72%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment		
Sample I.D.:	30224382005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30224382005DUP	
Sample Result (pCi/L, g, F):	0.322	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.134	
Sample Duplicate Result (pCi/L, g, F):	0.152	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.122	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.842	30224382005
Duplicate RPD:	~~71.88%~~	30224382005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

<2 acceptable for all matrices

Comments:

*The method blank result is below the reporting limit for this analysis and is acceptable.

~~***Batch must be re-prepped due to unacceptable precision.~~ JH 8/4/17

Quality Control Sample Performance Assessment

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Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	7/26/2017
Worklist:	36803
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1308228
MB concentration:	0.302
M/B Counting Uncertainty:	0.268
MB MDC:	0.549
MB Numerical Performance Indicator:	2.21
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS36803	LCSD36803
Count Date:	8/2/2017	
Spike I.D.:	17-005	
Spike Concentration (pCi/mL):	23.902	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.820	
Target Conc. (pCi/L, g, F):	5.833	
Uncertainty (Calculated):	0.420	
Result (pCi/L, g, F):	6.019	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.700	
Numerical Performance Indicator:	0.45	
Percent Recovery:	103.19%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment		
Sample I.D.:	30224382005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30224382005DUP	
Sample Result (pCi/L, g, F):	0.296	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.346	
Sample Duplicate Result (pCi/L, g, F):	0.756	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.446	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	~~1.599~~	30224382005
Duplicate RPD:	~~87.57%~~	30224382005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

CZ acceptable for all matrices

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ DM 8/4/17

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 24, 2017

Ms. Lauren Petty
GA Power
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: AAH0231 Plant Kraft
Pace Project No.: 30226552

Dear Ms. Petty:
Enclosed are the analytical results for sample(s) received by the laboratory on August 08, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures

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CERTIFICATIONS

Project: AAH0231 Plant Kraft
Pace Project No.: 30226552

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: AAH0231 Plant Kraft
Pace Project No.: 30226552

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30226552001	**KMW-08**	Water	08/04/17 10:52	08/08/17 10:00
30226552002	**KMW-10**	Water	08/04/17 11:40	08/08/17 10:00
30226552003	**KMW-11**	Water	08/04/17 13:15	08/08/17 10:00
30226552004	**KMW-12**	Water	08/04/17 12:41	08/08/17 10:00
30226552005	**KMW-15AR**	Water	08/04/17 11:04	08/08/17 10:00
30226552006	**Dup-01**	Water	08/04/17 00:00	08/08/17 10:00
30226552007	**EQBL080417**	Water	08/04/17 09:15	08/08/17 10:00
30226552008	**FBL080417**	Water	08/04/17 09:10	08/08/17 10:00

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SAMPLE ANALYTE COUNT

Project: AAH0231 Plant Kraft
Pace Project No.: 30226552

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30226552001	**KMW-08**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	CMC	1
30226552002	**KMW-10**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	CMC	1
30226552003	**KMW-11**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	CMC	1
30226552004	**KMW-12**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	CMC	1
30226552005	**KMW-15AR**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	CMC	1
30226552006	**Dup-01**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	CMC	1
30226552007	**EQBL080417**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	CMC	1
30226552008	**FBL080417**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	CMC	1

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAH0231 Plant Kraft
Pace Project No.: 30226552

Sample: KMW-08 **Lab ID: 30226552001** Collected: 08/04/17 10:52 Received: 08/08/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.616 ± 0.265 (0.327) C:85% T:NA**	pCi/L	08/14/17 08:18	13982-63-3	
Radium-228	EPA 9320	**0.165 ± 0.312 (0.685) C:77% T:88%**	pCi/L	08/16/17 15:51	15262-20-1	
Total Radium	Total Radium Calculation	**0.781 ± 0.577 (1.01)**	pCi/L	08/23/17 12:07	7440-14-4	

Sample: KMW-10 **Lab ID: 30226552002** Collected: 08/04/17 11:40 Received: 08/08/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.867 ± 0.291 (0.225) C:93% T:NA**	pCi/L	08/14/17 08:18	13982-63-3	
Radium-228	EPA 9320	**0.691 ± 0.456 (0.873) C:78% T:71%**	pCi/L	08/16/17 15:13	15262-20-1	
Total Radium	Total Radium Calculation	**1.56 ± 0.747 (1.10)**	pCi/L	08/23/17 12:07	7440-14-4	

Sample: KMW-11 **Lab ID: 30226552003** Collected: 08/04/17 13:15 Received: 08/08/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.40 ± 0.373 (0.233) C:93% T:NA**	pCi/L	08/14/17 08:19	13982-63-3	
Radium-228	EPA 9320	**0.343 ± 0.351 (0.725) C:72% T:84%**	pCi/L	08/16/17 15:13	15262-20-1	
Total Radium	Total Radium Calculation	**1.74 ± 0.724 (0.958)**	pCi/L	08/23/17 12:07	7440-14-4	

Sample: KMW-12 **Lab ID: 30226552004** Collected: 08/04/17 12:41 Received: 08/08/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**3.47 ± 0.685 (0.233) C:99% T:NA**	pCi/L	08/14/17 08:19	13982-63-3	
Radium-228	EPA 9320	**1.00 ± 0.427 (0.699) C:78% T:89%**	pCi/L	08/16/17 15:13	15262-20-1	
Total Radium	Total Radium Calculation	**4.47 ± 1.11 (0.932)**	pCi/L	08/23/17 12:07	7440-14-4	

Sample: KMW-15AR **Lab ID: 30226552005** Collected: 08/04/17 11:04 Received: 08/08/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.47 ± 0.393 (0.325) C:102% T:NA**	pCi/L	08/14/17 08:19	13982-63-3	
Radium-228	EPA 9320	**0.618 ± 0.384 (0.721) C:78% T:84%**	pCi/L	08/16/17 15:13	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAH0231 Plant Kraft
Pace Project No.: 30226552

Sample: KMW-15AR **Lab ID: 30226552005** Collected: 08/04/17 11:04 Received: 08/08/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**2.09 ± 0.777 (1.05)**	pCi/L	08/23/17 12:07	7440-14-4	

Sample: Dup-01 **Lab ID: 30226552006** Collected: 08/04/17 00:00 Received: 08/08/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.586 ± 0.227 (0.251) C:96% T:NA**	pCi/L	08/14/17 08:19	13982-63-3	
Radium-228	EPA 9320	**1.08 ± 0.461 (0.736) C:77% T:76%**	pCi/L	08/16/17 15:13	15262-20-1	
Total Radium	Total Radium Calculation	**1.67 ± 0.688 (0.987)**	pCi/L	08/23/17 12:07	7440-14-4	

Sample: EQBL080417 **Lab ID: 30226552007** Collected: 08/04/17 09:15 Received: 08/08/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0661 ± 0.128 (0.295) C:93% T:NA**	pCi/L	08/14/17 08:19	13982-63-3	
Radium-228	EPA 9320	**0.119 ± 0.342 (0.767) C:81% T:77%**	pCi/L	08/16/17 15:13	15262-20-1	
Total Radium	Total Radium Calculation	**0.185 ± 0.470 (1.06)**	pCi/L	08/23/17 12:07	7440-14-4	

Sample: FBL080417 **Lab ID: 30226552008** Collected: 08/04/17 09:10 Received: 08/08/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.199 ± 0.145 (0.245) C:96% T:NA**	pCi/L	08/14/17 08:20	13982-63-3	
Radium-228	EPA 9320	**0.411 ± 0.360 (0.725) C:75% T:81%**	pCi/L	08/16/17 15:13	15262-20-1	
Total Radium	Total Radium Calculation	**0.610 ± 0.505 (0.970)**	pCi/L	08/23/17 12:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AAH0231 Plant Kraft
Pace Project No.: 30226552

QC Batch: 267774 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30226552001, 30226552002, 30226552003, 30226552004, 30226552005, 30226552006, 30226552007, 30226552008

METHOD BLANK: 1317975 Matrix: Water
Associated Lab Samples: 30226552001, 30226552002, 30226552003, 30226552004, 30226552005, 30226552006, 30226552007, 30226552008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.145 ± 0.117 (0.187) C:96% T:NA	pCi/L	08/14/17 08:16	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AAH0231 Plant Kraft
Pace Project No.: 30226552

QC Batch: 267775 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30226552001, 30226552002, 30226552003, 30226552004, 30226552005, 30226552006, 30226552007, 30226552008

METHOD BLANK: 1317976 Matrix: Water
Associated Lab Samples: 30226552001, 30226552002, 30226552003, 30226552004, 30226552005, 30226552006, 30226552007, 30226552008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.108 ± 0.323 (0.774) C:77% T:81%	pCi/L	08/16/17 15:11	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAH0231 Plant Kraft
Pace Project No.: 30226552

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAH0231 Workorder Name: Plant Kraft Owner Received Date: Results Requested By: 8/30/2017

Report To:	Subcontract To:
Betsy McDaniel	Pace - Pittsburgh
Pace Analytical Atlanta	1638 Roseytown Road
110 Technology Parkway	Stes. 2,3,4
Peachtree Corners, GA 30092	Greensburg, PA 15601
Phone (770)-734-4200	Phone (724) 850-5600

WO#:30226552

30226552

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	KMW-08	G	8/4/2017 10:52	AAH0231-01	GW	2	X	001
2	KMW-10	G	8/4/2017 11:40	AAH0231-03	GW	4	X	002
3	KMW-11	G	8/4/2017 13:15	AAH0231-04	GW	2	X	003
4	KMW-12	G	8/4/2017 12:41	AAH0231-05	GW	2	X	004
5	MW-15AR	G	8/4/2017 11:04	AAH0231-06	GW	2	X	005
6	Dup-01	G	8/4/2017 0:00	AAH0231-07	GW	2	X	006
7	EQBL080417	G	8/4/2017 9:15	AAH0231-08	W	2	X	007
8	FBL080417	G	8/4/2017 9:10	AAH0231-09	W	2	X	008
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	Charles Hunter	8/7/17 1730	C. Conway Hines	8/8/17 1000	Sample AAH0231-02 does not get Rads analysis
2					
3					

Cooler Temperature on Receipt	°C	Custody Seal Y or N	Received on Ice Y or N	Sample Intact Y or N
	1.4			

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

CHAIN OF CUSTODY RECORD

Pace Analytical
www.pacelabs.com

Pace Analytical Services, LLC - Atlanta GA
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

CLIENT NAME: GEORGIA POWER COMPANY

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 RALPH MCGILL BLVD SE B10185 ATLANTA, GA 30308

REPORT TO: LEA MILLET

CC: STEPHEN.WILSON@SOUTHERNCO.COM

REQUESTED COMPLETION DATE:

PO #:

PROJECT NAME/STATE: GPC PLANT KRAFT

PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	ARSENIC, EPA 6020	RADIUM 226 & 228, SW 846, 9320								LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:							P	P									
PRESERVATION:							3	3									
03/04/17	1052	GW		X	KMW-08	3	1	2								1	2 COOLERS
03/03/17	1555	GW		X	KMW-09	1	1									2	
03/04/17	1140	GW		X	KMW-10	5	1	4								3	
03/04/17	1315	GW		X	KMW-11	2		2								4	
03/04/17	1241	GW		X	KMW-12	2		2								5	
03/04/17	1104	GW		X	MW-15A(R)	2		2								6	302265552
~~03/04/17~~	—	~~GW~~		~~X~~	~~DUP-01~~	3	1	2								7	
03/04/17	0915	W		X	EQBL-030417	3	1	2								8	
03/04/17	0910	W		X	FBL-030417	3	1	2								9	

ANALYSIS REQUESTED

LAB ID NUMBER

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_4, ≤6°C
G - CLEAR GLASS	3 - HNO_3
V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	6 - $Na_2S_2O_3$, ≤6°C
	7 - ≤6°C not frozen

*MATRIX CODES:

DW - DRINKING WATER	S - SOIL
WW - WASTEWATER	SL - SLUDGE
GW - GROUNDWATER	SD - SOLID
SW - SURFACE WATER	A - AIR
ST - STORM WATER	L - LIQUID
W - WATER	P - PRODUCT

SAMPLED BY AND TITLE: ROBERT MULL, MICHAEL FESTINER, FORREST HOWARD

DATE/TIME: 03/04/17 1515

RELINQUISHED BY:

DATE/TIME: 03/04/17

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY/LAB:

DATE/TIME: 3/5/17 0930

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present N/A

# of Coolers:

Cooler ID:

pH Checked: Yes No NA

Lot: Yes No NA

Temperature: Min 2.4 °C, Max:

FOR LAB USE ONLY

LAB #: AH-H0231

Entered into LIMS: 1/17

Tracking #: 787412583381

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project # AA#0231

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other ____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: 7874 1258 3381

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other ____

Thermometer Used: IR-4 Type of Ice: Wet Blue (None) ☐ Samples on ice, cooling process has begun

Cooler Temperature: 2.4, 2.2 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ____

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A	1. 30226552
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: GW				
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No		Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☐No	☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if purchased): ____				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: ____ Date/Time: ____

Comments/ Resolution: ____

Project Manager Review: ____ Date: ____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Sample Condition Upon Receipt Pittsburgh

30226552

Pace Analytical

Client Name: PACE GA Project #

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Label AM

LIMS Login AM

Tracking #: 7473665 7120

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☐ no

Thermometer Used VR Type of Ice: Wet Blue None

Cooler Temperature Observed Temp VR °C Correction Factor: ___ °C Final Temp: ___ °C

Temp should be above freezing to 6°C

Date and initials of person examining contents: CK 8/8/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:	✓			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	X	✓		7. COC 8/8/17
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Organic Samples checked for dechlorination:			✓	13.
Filtered volume received for Dissolved tests			✓	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.	✓			15. pH <2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed CK Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	16.
Trip Blank Present:		✓		17.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: CK Date: 8/8/17

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	8/11/2017
Worklist:	37124
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1317976
MB concentration:	-0.108
M/B Counting Uncertainty:	0.322
MB MDC:	0.774
MB Numerical Performance Indicator:	-0.66
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)? LCS37124	N LCSD37124
Count Date:	8/16/2017	
Spike I.D.:	17-005	
Spike Concentration (pCi/mL):	23.792	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.803	
Target Conc. (pCi/L, g, F):	5.929	
Uncertainty (Calculated):	0.427	
Result (pCi/L, g, F):	6.626	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.754	
Numerical Performance Indicator:	1.58	
Percent Recovery:	111.76%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment		
Sample I.D.:	30226434002	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30226434002DUP	
Sample Result (pCi/L, g, F):	2.219	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.509	
Sample Duplicate Result (pCi/L, g, F):	2.137	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.493	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	0.228	30226434002
Duplicate RPD:	3.79%	30226434002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

8/24/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	JC2
Date:	8/11/2017
Worklist:	37123
Matrix:	DW

Method Blank Assessment

MB Sample ID	1317975
MB concentration:	0.145
M/B Counting Uncertainty:	0.115
MB MDC:	0.187
MB Numerical Performance Indicator:	2.47
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS37123	LCSD37123
Count Date:	8/14/2017	
Spike I.D.:	17-030	
Spike Concentration (pCi/mL):	80.196	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.504	
Target Conc. (pCi/L, g, F):	15.915	
Uncertainty (Calculated):	1.466	
Result (pCi/L, g, F):	13.872	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.967	
Numerical Performance Indicator:	-2.28	
Percent Recovery:	87.16%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Sample Matrix Spike Control Assessment

Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment

		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30225850001	
Duplicate Sample I.D.	30225850001DUP	
Sample Result (pCi/L, g, F):	0.289	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.185	
Sample Duplicate Result (pCi/L, g, F):	0.493	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.219	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.391	30225850001
Duplicate RPD:	51.95%	30225850001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

***Batch must be re-prepped due to unacceptable precision.

8/24/17

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 12, 2017

Mr. Joju Abraham
Georgia Power
2480 Maner Road
Atlanta, GA 30339

RE: Project: AAH0560 Plant Kraft
Pace Project No.: 30227599

Dear Mr. Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on August 18, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAH0560 Plant Kraft
Pace Project No.: 30227599

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAH0560 Plant Kraft
Pace Project No.: 30227599

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30227599001	**KMW-05**	Water	08/15/17 11:30	08/18/17 10:00
30227599002	**KMW-06**	Water	08/15/17 14:12	08/18/17 10:00
30227599003	**KMW-07**	Water	08/15/17 15:50	08/18/17 10:00
30227599004	**Dup-01**	Water	08/15/17 00:00	08/18/17 10:00
30227599005	**KMW-01**	Water	08/16/17 09:58	08/18/17 10:00
30227599006	**EQBL081617**	Water	08/16/17 11:40	08/18/17 10:00

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAH0560 Plant Kraft
Pace Project No.: 30227599

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30227599001	**KMW-05**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30227599002	**KMW-06**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30227599003	**KMW-07**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30227599004	**Dup-01**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30227599005	**KMW-01**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30227599006	**EQBL081617**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAH0560 Plant Kraft
Pace Project No.: 30227599

Sample: KMW-05 **Lab ID: 30227599001** Collected: 08/15/17 11:30 Received: 08/18/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.26 ± 0.324 (0.151) C:94% T:NA**	pCi/L	09/05/17 07:36	13982-63-3	
Radium-228	EPA 9320	**5.83 ± 1.31 (0.824) C:73% T:69%**	pCi/L	09/07/17 15:15	15262-20-1	
Total Radium	Total Radium Calculation	**7.09 ± 1.63 (0.975)**	pCi/L	09/10/17 12:55	7440-14-4	

Sample: KMW-06 **Lab ID: 30227599002** Collected: 08/15/17 14:12 Received: 08/18/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.19 ± 0.480 (0.170) C:90% T:NA**	pCi/L	09/05/17 07:36	13982-63-3	
Radium-228	EPA 9320	**7.25 ± 1.60 (0.979) C:61% T:73%**	pCi/L	09/07/17 15:15	15262-20-1	
Total Radium	Total Radium Calculation	**9.44 ± 2.08 (1.15)**	pCi/L	09/10/17 12:55	7440-14-4	

Sample: KMW-07 **Lab ID: 30227599003** Collected: 08/15/17 15:50 Received: 08/18/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.42 ± 0.521 (0.207) C:90% T:NA**	pCi/L	09/05/17 07:36	13982-63-3	
Radium-228	EPA 9320	**7.99 ± 1.69 (0.871) C:69% T:73%**	pCi/L	09/07/17 15:15	15262-20-1	
Total Radium	Total Radium Calculation	**10.4 ± 2.21 (1.08)**	pCi/L	09/10/17 12:55	7440-14-4	

Sample: Dup-01 **Lab ID: 30227599004** Collected: 08/15/17 00:00 Received: 08/18/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.58 ± 0.379 (0.161) C:96% T:NA**	pCi/L	09/05/17 07:36	13982-63-3	
Radium-228	EPA 9320	**7.97 ± 1.68 (0.852) C:64% T:80%**	pCi/L	09/07/17 15:15	15262-20-1	
Total Radium	Total Radium Calculation	**9.55 ± 2.06 (1.01)**	pCi/L	09/10/17 12:55	7440-14-4	

Sample: KMW-01 **Lab ID: 30227599005** Collected: 08/16/17 09:58 Received: 08/18/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.51 ± 0.376 (0.215) C:90% T:NA**	pCi/L	09/05/17 07:36	13982-63-3	
Radium-228	EPA 9320	**11.4 ± 2.30 (0.809) C:69% T:71%**	pCi/L	09/07/17 15:15	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAH0560 Plant Kraft
Pace Project No.: 30227599

Sample: KMW-01 **Lab ID: 30227599005** Collected: 08/16/17 09:58 Received: 08/18/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**12.9 ± 2.68 (1.02)**	pCi/L	09/10/17 12:55	7440-14-4	

Sample: EQBL081617 **Lab ID: 30227599006** Collected: 08/16/17 11:40 Received: 08/18/17 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.363 ± 0.196 (0.283) C:74% T:NA**	pCi/L	09/05/17 07:36	13982-63-3	
Radium-228	EPA 9320	**0.438 ± 0.419 (0.848) C:65% T:71%**	pCi/L	09/07/17 15:15	15262-20-1	
Total Radium	Total Radium Calculation	**0.801 ± 0.615 (1.13)**	pCi/L	09/10/17 12:55	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAH0560 Plant Kraft
Pace Project No.: 30227599

QC Batch: 270015 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30227599001, 30227599002, 30227599003, 30227599004, 30227599005, 30227599006

METHOD BLANK: 1328717 Matrix: Water
Associated Lab Samples: 30227599001, 30227599002, 30227599003, 30227599004, 30227599005, 30227599006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.268 ± 0.139 (0.154) C:96% T:NA	pCi/L	09/05/17 07:36	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAH0560 Plant Kraft
Pace Project No.: 30227599

QC Batch: 270013 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30227599001, 30227599002, 30227599003, 30227599004, 30227599005, 30227599006

METHOD BLANK: 1328715 Matrix: Water
Associated Lab Samples: 30227599001, 30227599002, 30227599003, 30227599004, 30227599005, 30227599006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0454 ± 0.342 (0.809) C:75% T:79%	pCi/L	09/07/17 15:15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAH0560 Plant Kraft
Pace Project No.: 30227599

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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Chain of Custody

Pace Analytical

Workorder: AAH0560 Workorder Name: Plant Kraft Owner Received Date: 8/17/2017 Results Requested By: Standard

Report To:	Subcontract To:
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200	Pace Analytical Pittsburg 1637 Roseytown Road Suite 2, 3, 4 Greensburg, PA 15601 Phone (724) 850-5600

Requested Analysis

WO#:30227599

30227599

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers				Radium 226, 228, Total	0	0	LAB USE ONLY
								#HO3	0	0			
1	KMW-05	GRAB	8/15/2017 1130	AAH0560-01	GW			2			X		001
2	KMW-06	GRAB	8/15/2017 1412	AAH0560-02	GW			2			X		002
3	KMW-07	GRAB	8/15/2017 1550	AAH0560-03	GW			2			X		003
4	Dup-01	GRAB	8/15/2017 0000	AAH0560-04	GW			2			X		004
5	KMW-01	GRAB	8/16/2017 0958	AAH0560-05	GW			2			X		005
6	EQBL081617	GRAB	8/16/2017 1140	AAH0560-06	W			2			X		006
7													
8													
9													
10													

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	8/17/17		8/17/17 1000	
2					
3					

Cooler Temperature on Receipt N/A °C | Custody Seal Y or N | Received on Ice Y or N | Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

CHAIN OF CUSTODY RECORD

Pace Analytical
www.pacelabs.com

Pace Analytical Services, LLC - Atlanta GA
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

CLIENT NAME: Georgia Power Company

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd SE B10185
Atlanta GA 30308

REPORT TO: Lea Millet
CC: Trent Godwin, stephen Wilson

REQUESTED COMPLETION DATE:
PO #:

PROJECT NAME/STATE: Plant Kraft

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Radium 226 & 228 SW-846	9315 & 9320	LAB ID NUMBER
8/15/17	1130	GW	X	X	KMW-05	2	X		1
8/15/17	1412	GW	X	X	KMW-06	2	X		2
8/15/17	1550	GW	X	X	KMW-07	2	X		3
8/15/17	/	GW		X	Dup-01	2	X		4
8/16/17	0958	GW		X	KMW-01	2	X		5
8/16/17	1140	OW		X	EQBLK08.16.17	2	X		6

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_4, ≤6°C
G - CLEAR GLASS	3 - HNO_3
V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	6 - $Na_2S_2O_3$, ≤6°C
	7 - ≤6°C not frozen

*MATRIX CODES:

DW - DRINKING WATER	S - SOIL
WW - WASTEWATER	SL - SLUDGE
GW - GROUNDWATER	SD - SOLID
SW - SURFACE WATER	A - AIR
~~ST - STORM WATER~~	~~L - LIQUID~~
W - WATER	P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

3022759 9

SAMPLED BY AND TITLE: Forrest Hoccutt
DATE/TIME: 8/16/17 1220
RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME: 8/16/17 1700
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY / LAB: Tyra Summerville
DATE/TIME: 08/17/17 0910
Pace Shipped: Yes No N/A
Intact: Yes No N/A
Temperature: Min 2.7 °C Max 2.7 °C

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Custody Seal: Present Broken Not Present N/A
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: 22410560
Entered into LIMS: 8/17/17 mz
Tracking #: 7708 2629 3465

30227599

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Powere Project # KAH0560

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Optional: Proj. Due Date: Proj. Name:

Tracking #: 7700 2629 3465

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other _____

Thermometer Used: 10-4 Type of Ice: Wet Blue (None) ☐ Samples on ice, cooling process has begun

Cooler Temperature: 2.2 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C Comments:

Date and Initials of person examining contents: 8/17/17 MK

Chain of Custody Present:	☒Yes	☐No	☐N/A	1.	
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.	
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.	
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.	
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	5.	
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.	
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	7.	
Sufficient Volume:	☒Yes	☐No	☐N/A	8.	
Correct Containers Used:	☒Yes	☐No	☐N/A	9.	
-Pace Containers Used:	☒Yes	☐No	☐N/A		
Containers Intact:	☒Yes	☐No	☐N/A	10.	
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.	
Sample Labels match COC:	☒Yes	☐No	☐N/A	12.	
-Includes date/time/ID/Analysis Matrix: GW					
All containers needing preservation have been checked.	☐Yes	☐No	☒N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☒Yes	☐No	☐N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☒No		Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☒N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	15.	
Trip Blank Present:	☐Yes	☐No	☒N/A	16.	
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A		
Pace Trip Blank Lot # (if purchased):					

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALLC003rev.3 11September2008

Sample Condition Upon Receipt Pittsburgh 30227599

Pace Analytical

Client Name: PACE, GA Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Label AM

LIMS Login AM

Tracking #: 774136657949 98

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☐ no

Thermometer Used WIA Type of Ice: Wet Blue None

Cooler Temperature Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Date and initials of person examining contents: ZH 8/18/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:	✓			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered				12.
Organic Samples checked for dechlorination:			✓	13.
Filtered volume received for Dissolved tests			✓	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.	✓ ✓			15. PH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed ZH Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: ZH Date: 8/18/17

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	JC2
Date:	9/1/2017
Worklist:	37503
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1328717
MB concentration:	0.268
M/B Counting Uncertainty:	0.133
MB MDC:	0.154
MB Numerical Performance Indicator:	3.95
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS37503	LCSD37503
Count Date:	9/5/2017	9/5/2017
Spike I.D.:	17-030	17-030
Spike Concentration (pCi/mL):	80.193	80.193
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.506
Target Conc. (pCi/L, g, F):	15.837	15.859
Uncertainty (Calculated):	1.459	1.461
Result (pCi/L, g, F):	13.064	14.005
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.854	0.884
Numerical Performance Indicator:	-3.22	-2.13
Percent Recovery:	82.49%	88.31%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment		
Sample I.D.:	LCS37503	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD37503	
Sample Result (pCi/L, g, F):	13.064	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.854	
Sample Duplicate Result (pCi/L, g, F):	14.005	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.884	
Are sample and/or duplicate results below MDC?	NO	
Duplicate Numerical Performance Indicator:	-1.501	
Duplicate RPD:	6.96%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*The method blank result is below the reporting limit for this analysis and is acceptable.

9/12/17

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	9/5/2017
Worklist:	37502
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1328715
MB concentration:	-0.045
M/B Counting Uncertainty:	0.342
MB MDC:	0.809
MB Numerical Performance Indicator:	-0.26
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS37502	LCSD37502
Count Date:	9/7/2017	9/7/2017
Spike I.D.:	17-005	17-005
Spike Concentration (pCi/mL):	23.620	23.620
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.807	0.805
Target Conc. (pCi/L, g, F):	5.854	5.866
Uncertainty (Calculated):	0.421	0.422
Result (pCi/L, g, F):	6.476	7.838
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.753	0.793
Numerical Performance Indicator:	1.41	4.30
Percent Recovery:	110.63%	133.62%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc.(pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Duplicate Sample Assessment		
Sample I.D.:	LCS37502	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD37502	
Sample Result (pCi/L, g, F):	6.476	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.753	
Sample Duplicate Result (pCi/L, g, F):	7.838	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.793	
Are sample and/or duplicate results below MDC?	NO	
Duplicate Numerical Performance Indicator:	-2.441	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	18.83%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

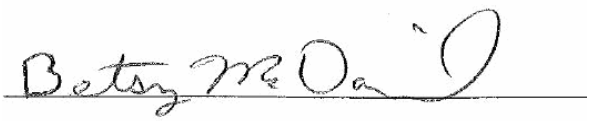
Georgia Power
42 Inverness Center Parkway
Birmingham, AL 35242

Attention: Ms. Lauren Petty

Report Number: AAH0231
August 15, 2017
Project: Georgia HSRA Program
Project #:Plant Kraft

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

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All test results relate only to the samples analyzed.

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
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(770) 734-4200 FAX (770) 734-4201

Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

August 15, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
KMW-08	AAH0231-01	Ground Water	08/04/17 10:52	08/05/17 09:30
KMW-09	AAH0231-02	Ground Water	08/03/17 15:55	08/05/17 09:30
KMW-10	AAH0231-03	Ground Water	08/04/17 11:40	08/05/17 09:30
DUP-01	AAH0231-07	Ground Water	08/04/17 00:00	08/05/17 09:30
EQBL080417	AAH0231-08	Water	08/04/17 09:15	08/05/17 09:30
FBL080417	AAH0231-09	Water	08/04/17 09:10	08/05/17 09:30

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Attention: Ms. Lauren Petty

August 15, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.

PACE ANALYTICAL SERVICES, LLC.

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Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

August 15, 2017

Report No.: AAH0231
Client ID: KMW-08
Date/Time Sampled: 8/4/2017 10:52:00AM
Matrix: Ground Water

Project: Georgia HSRA Program
Lab Number ID: AAH0231-01
Date/Time Received: 8/5/2017 9:30:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Metals, Total											
Arsenic	0.0008	0.0050	0.0005	mg/L	EPA 6020B	J	1	08/11/17 13:05	08/14/17 15:09	7080271	CSW

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42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

August 15, 2017

Report No.: AAH0231
Client ID: KMW-09
Date/Time Sampled: 8/3/2017 3:55:00PM
Matrix: Ground Water

Project: Georgia HSRA Program
Lab Number ID: AAH0231-02
Date/Time Received: 8/5/2017 9:30:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Metals, Total											
Arsenic	0.0009	0.0050	0.0005	mg/L	EPA 6020B	J	1	08/11/17 13:05	08/14/17 15:14	7080271	CSW

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Birmingham AL, 35242

Attention: Ms. Lauren Petty

August 15, 2017

Report No.: AAH0231
Client ID: KMW-10
Date/Time Sampled: 8/4/2017 11:40:00AM
Matrix: Ground Water

Project: Georgia HSRA Program
Lab Number ID: AAH0231-03
Date/Time Received: 8/5/2017 9:30:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Metals, Total											
Arsenic	0.0011	0.0050	0.0005	mg/L	EPA 6020B	J	1	08/11/17 13:05	08/14/17 15:20	7080271	CSW

PACE ANALYTICAL SERVICES, LLC.

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Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

August 15, 2017

Report No.: AAH0231
Client ID: DUP-01
Date/Time Sampled: 8/4/2017 12:00:00AM
Matrix: Ground Water

Project: Georgia HSRA Program
Lab Number ID: AAH0231-07
Date/Time Received: 8/5/2017 9:30:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Metals, Total											
Arsenic	0.0011	0.0050	0.0005	mg/L	EPA 6020B	J	1	08/11/17 13:05	08/14/17 15:26	7080271	CSW

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Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

August 15, 2017

Report No.: AAH0231
Client ID: EQBL080417
Date/Time Sampled: 8/4/2017 9:15:00AM
Matrix: Water

Project: Georgia HSRA Program
Lab Number ID: AAH0231-08
Date/Time Received: 8/5/2017 9:30:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Metals, Total											
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	08/11/17 13:05	08/14/17 15:32	7080271	CSW

PACE ANALYTICAL SERVICES, LLC.

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Georgia Power
42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

August 15, 2017

Report No.: AAH0231
Client ID: FBL080417
Date/Time Sampled: 8/4/2017 9:10:00AM
Matrix: Water

Project: Georgia HSRA Program
Lab Number ID: AAH0231-09
Date/Time Received: 8/5/2017 9:30:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Metals, Total											
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	08/11/17 13:05	08/14/17 16:06	7080271	CSW

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42 Inverness Center Parkway
Birmingham AL, 35242

Attention: Ms. Lauren Petty

August 15, 2017

Report No.: AAH0231

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080271 - EPA 3005A											
Blank (7080271-BLK1)						Prepared: 08/11/17 Analyzed: 08/14/17					
Arsenic	ND	0.0050	0.0005	mg/L							
LCS (7080271-BS1)						Prepared: 08/11/17 Analyzed: 08/14/17					
Arsenic	0.0991	0.0050	0.0005	mg/L	0.10000		99	80-120			
Matrix Spike (7080271-MS1)		**Source: AAH0231-02**				Prepared: 08/11/17 Analyzed: 08/14/17					
Arsenic	0.101	0.0050	0.0005	mg/L	0.10000	0.0009	100	75-125			
Matrix Spike Dup (7080271-MSD1)		**Source: AAH0231-02**				Prepared: 08/11/17 Analyzed: 08/14/17					
Arsenic	0.0993	0.0050	0.0005	mg/L	0.10000	0.0009	98	75-125	2	20	
Post Spike (7080271-PS1)		**Source: AAH0231-02**				Prepared: 08/11/17 Analyzed: 08/14/17					
Arsenic	98.8			ug/L	100.00	0.934	98	80-120			

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Birmingham AL, 35242

Attention: Ms. Lauren Petty

August 15, 2017

Legend

Definition of Laboratory Terms

ND - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD

Pace Analytical
www.pacelabs.com

Pace Analytical Services, LLC - Atlanta GA
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1

CLIENT NAME: GEORGIA POWER COMPANY

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 RALPH MCGILL BLVD SE B10185
ATLANTA, GA 30308

REPORT TO: LEA MILLET
CC: STEPHEN.WILSON@RESOLUTEENV.COM

REQUESTED COMPLETION DATE:
PO #:

PROJECT NAME/STATE: GPC PLANT KRAFT

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	CONTAINER TYPE:	P	P								LAB ID NUMBER
							PRESERVATION:	3	3								
								ARSENIC EPA 6020	RADIUM 226 & 228 SW 846, 9315, 9320								
08/04/17	1052	GW		X	KMW-08	3		1	2								1
08/03/17	1555	GW		X	KMW-09	1		1									2
08/04/17	1140	GW		X	KMW-10	5		1	4								3
08/04/17	1315	GW		X	KMW-11	2			2								4
08/04/17	1241	GW		X	KMW-12	2			2								5
08/04/17	1104	GW		X	MW-15A(R)	2			2								6
08/04/17	—	GW		X	DUP-01	3		1	2								7
08/04/17	0915	W		X	EQBL-080417	3		1	2								8
08/04/17	0910	W		X	FBL-080417	3		1	2								9

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_4, ≤6°C
G - CLEAR GLASS	3 - HNO_3
V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	6 - $Na_2S_2O_3$, ≤6°C
	7 - ≤6°C not frozen

*MATRIX CODES:

DW - DRINKING WATER	S - SOIL
WW - WASTEWATER	SL - SLUDGE
GW - GROUNDWATER	SD - SOLID
SW - SURFACE WATER	A - AIR
ST - STORM WATER	L - LIQUID
W - WATER	P - PRODUCT

REMARKS/ADDITIONAL INFORMATION
2 COOLERS

SAMPLED BY AND TITLE: ROBERT MULL
MICHAEL PATINKIN, FORREST HOWARD
DATE/TIME: 08/04/17 1515

RELINQUISHED BY:
DATE/TIME: 08/04/17

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB:
DATE/TIME: 8/5/17 0930

SAMPLE SHIPPED VIA:
UPS FED-EX USPS COURIER CLIENT OTHER FS

Tracking #: 787412583381

Custody Seal: Intact Broken Not Present N/A
# of Coolers:
Cooler ID:

Temperature: Min: 2.4°C Max:

Received: No NA
Ice: Yes No NA

FOR LAB USE ONLY
LAB #: AH0231
Entered into LIMS:

Sample Condition Upon Receipt

Pace Analytical

Client Name: Gt Power Project # AAH0231

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: 7874 1258 3381

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used: IR-4 Type of Ice: Wet Blue (None) ☐ Samples on ice, cooling process has begun

Cooler Temperature: 2.4°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: _____

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: GW		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 8/7/2017 2:31:01PM**

Attn: Ms. Lauren Petty

Client: Georgia Power
Project: Georgia HSRA Program
Date Received: 08/05/17 09:30

Work Order: AAH0231
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 9 **#Containers:** 24

Minimum Temp(C): 22.4 **Maximum Temp(C):** 22.4 **Custody Seal(s) Used:** Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	NO
Preservation Confirmed	YES

Comments:

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 05, 2018

Lauren Petty
Southern Company Services, Inc.
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: Plant Kraft AP
Pace Project No.: 261658

Dear Lauren Petty:
Enclosed are the analytical results for sample(s) received by the laboratory on February 09, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kevin Stephenson, Resolute Environmental & Water Resources Consulting, LLC
Stephen Wilson, Resolute Environmental & Water Resources Consulting, LLC

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Kraft AP
Pace Project No.: 261658

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Texas Certification #: T104704397-08-TX
Virginia Certification #: 460204

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Kraft AP
Pace Project No.: 261658

Lab ID	Sample ID	Matrix	Date Collected	Date Received
261658001	**KMW-08**	Water	02/08/18 13:30	02/09/18 09:30
261658002	**KMW-08**	Water	02/08/18 13:30	02/09/18 09:30
261658003	**KMW-12**	Water	02/08/18 15:05	02/09/18 09:30
261658004	**KMW-12**	Water	02/08/18 15:05	02/09/18 09:30
261658005	**KMW-09**	Water	02/08/18 09:45	02/09/18 09:30
261658006	**KMW-09**	Water	02/08/18 09:45	02/09/18 09:30
261658007	**KMW-10**	Water	02/08/18 11:50	02/09/18 09:30
261658008	**KMW-10**	Water	02/08/18 11:50	02/09/18 09:30
261658009	**EQBL020818**	Water	02/08/18 16:15	02/09/18 09:30
261658010	**EQBL020818**	Water	02/08/18 16:15	02/09/18 09:30
261658011	**FBL020818**	Water	02/08/18 16:30	02/09/18 09:30
261658012	**FBL020818**	Water	02/08/18 16:30	02/09/18 09:30
261658013	**KMW-11**	Water	02/08/18 17:20	02/09/18 09:30
261658014	**KMW-11**	Water	02/08/18 17:20	02/09/18 09:30
261658015	**Dup-02**	Water	02/08/18 00:00	02/09/18 09:30
261658016	**Dup-02**	Water	02/08/18 00:00	02/09/18 09:30

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Kraft AP
Pace Project No.: 261658

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
261658001	**KMW-08**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261658002	**KMW-08**	EPA 6020B	KLH	1	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261658003	**KMW-12**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261658004	**KMW-12**	EPA 6020B	CSW, KLH	5	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261658005	**KMW-09**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261658006	**KMW-09**	EPA 6020B	KLH	1	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261658007	**KMW-10**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261658008	**KMW-10**	EPA 6020B	KLH	1	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261658009	**EQBL020818**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261658010	**EQBL020818**	EPA 6020B	KLH	5	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261658011	**FBL020818**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Plant Kraft AP
Pace Project No.: 261658

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	CMC	1	PASI-PA
261658012	**FBL020818**	EPA 6020B	KLH	5	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261658013	**KMW-11**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261658014	**KMW-11**	EPA 6020B	KLH	5	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261658015	**Dup-02**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261658016	**Dup-02**	EPA 6020B	KLH	5	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-08 **Lab ID: 261658002** Collected: 02/08/18 13:30 Received: 02/09/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 15:52	7440-38-2	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**9.5**	mg/L	1.0	1.0	1		02/23/18 12:50		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/23/18 12:50		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**106**	mg/L	25.0	25.0	1		02/12/18 19:47		D6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**8.3**	mg/L	0.25	0.024	1		02/12/18 17:32	16887-00-6	
Sulfate	**18.3**	mg/L	1.0	0.017	1		02/12/18 17:32	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-12 **Lab ID: 261658004** Collected: 02/08/18 15:05 Received: 02/09/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 16:53	7440-38-2	
Calcium	**266000**	ug/L	25000	2020	50	02/15/18 08:13	02/15/18 16:59	7440-70-2	
Magnesium	**31600**	ug/L	2500	314	50	02/15/18 08:13	02/15/18 16:59	7439-95-4	
Potassium	**13500**	ug/L	5000	825	50	02/15/18 08:13	02/15/18 16:59	7440-09-7	
Sodium	**682000**	ug/L	25000	3370	250	02/15/18 08:13	02/22/18 14:05	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**64.0**	mg/L	20.0	20.0	1		02/22/18 18:54		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		02/22/18 18:54		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**3540**	mg/L	250	250	1		02/12/18 19:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**1540**	mg/L	25.0	2.4	100		02/22/18 16:53	16887-00-6	
Sulfate	**261J**	mg/L	100	1.7	100		02/22/18 16:53	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-09 **Lab ID: 261658006** Collected: 02/08/18 09:45 Received: 02/09/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 17:05	7440-38-2	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**92.0**	mg/L	20.0	20.0	1		02/22/18 18:57		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		02/22/18 18:57		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**285**	mg/L	25.0	25.0	1		02/12/18 19:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**68.1**	mg/L	2.5	0.24	10		02/22/18 17:13	16887-00-6	
Sulfate	**26.5J**	mg/L	10.0	0.17	10		02/22/18 17:13	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-10 **Lab ID: 261658008** Collected: 02/08/18 11:50 Received: 02/09/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	**2.3J**	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 17:29	7440-38-2	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**105**	mg/L	20.0	20.0	1		02/19/18 16:57		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		02/19/18 16:57		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**174**	mg/L	25.0	25.0	1		02/12/18 19:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**8.3**	mg/L	0.25	0.024	1		02/12/18 19:57	16887-00-6	
Sulfate	**5.9**	mg/L	1.0	0.017	1		02/12/18 19:57	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: EQBL020818 **Lab ID: 261658010** Collected: 02/08/18 16:15 Received: 02/09/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 17:41	7440-38-2	
Calcium	ND	ug/L	500	40.4	1	02/15/18 08:13	02/15/18 17:41	7440-70-2	
Magnesium	ND	ug/L	50.0	6.3	1	02/15/18 08:13	02/15/18 17:41	7439-95-4	
Potassium	ND	ug/L	100	16.5	1	02/15/18 08:13	02/15/18 17:41	7440-09-7	
Sodium	**22.7J**	ug/L	100	13.5	1	02/15/18 08:13	02/15/18 17:41	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/22/18 16:38		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/22/18 16:38		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/12/18 19:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**0.31J**	mg/L	0.25	0.024	1		02/12/18 20:18	16887-00-6	
Sulfate	ND	mg/L	1.0	0.017	1		02/12/18 20:18	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: FBL020818 **Lab ID: 261658012** Collected: 02/08/18 16:30 Received: 02/09/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 17:46	7440-38-2	
Calcium	ND	ug/L	500	40.4	1	02/15/18 08:13	02/15/18 17:46	7440-70-2	
Magnesium	ND	ug/L	50.0	6.3	1	02/15/18 08:13	02/15/18 17:46	7439-95-4	
Potassium	ND	ug/L	100	16.5	1	02/15/18 08:13	02/15/18 17:46	7440-09-7	
Sodium	ND	ug/L	100	13.5	1	02/15/18 08:13	02/15/18 17:46	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/22/18 16:45		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/22/18 16:45		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/12/18 19:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	ND	mg/L	0.25	0.024	1		02/12/18 20:59	16887-00-6	
Sulfate	ND	mg/L	1.0	0.017	1		02/12/18 20:59	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-11 **Lab ID: 261658014** Collected: 02/08/18 17:20 Received: 02/09/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 17:52	7440-38-2	
Calcium	**191000**	ug/L	25000	2020	50	02/15/18 08:13	02/15/18 17:58	7440-70-2	
Magnesium	**7460**	ug/L	50.0	6.3	1	02/15/18 08:13	02/15/18 17:52	7439-95-4	
Potassium	**3810**	ug/L	100	16.5	1	02/15/18 08:13	02/15/18 17:52	7440-09-7	
Sodium	**59900**	ug/L	5000	674	50	02/15/18 08:13	02/15/18 17:58	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**119**	mg/L	20.0	20.0	1		02/19/18 17:09		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		02/19/18 17:09		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**1200**	mg/L	125	125	1		02/12/18 19:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**355**	mg/L	5.0	0.48	20		02/27/18 04:35	16887-00-6	
Sulfate	**92.4**	mg/L	10.0	0.17	10		02/22/18 17:34	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: Dup-02 **Lab ID: 261658016** Collected: 02/08/18 00:00 Received: 02/09/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 18:09	7440-38-2	
Calcium	**186000**	ug/L	25000	2020	50	02/15/18 08:13	02/15/18 18:15	7440-70-2	
Magnesium	**7380**	ug/L	50.0	6.3	1	02/15/18 08:13	02/15/18 18:09	7439-95-4	
Potassium	**3770**	ug/L	100	16.5	1	02/15/18 08:13	02/15/18 18:09	7440-09-7	
Sodium	**59100**	ug/L	5000	674	50	02/15/18 08:13	02/15/18 18:15	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**119**	mg/L	20.0	20.0	1		02/19/18 17:18		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		02/19/18 17:18		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**1060**	mg/L	125	125	1		02/12/18 19:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**347**	mg/L	5.0	0.48	20		02/27/18 04:55	16887-00-6	
Sulfate	**90.9**	mg/L	10.0	0.17	10		02/22/18 17:55	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Kraft AP
Pace Project No.: 261658

QC Batch: 911 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 261658002, 261658004, 261658006, 261658008, 261658010, 261658012, 261658014, 261658016

METHOD BLANK: 6438 Matrix: Water
Associated Lab Samples: 261658002, 261658004, 261658006, 261658008, 261658010, 261658012, 261658014, 261658016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	ND	5.0	0.52	02/15/18 13:46	
Calcium	ug/L	ND	500	40.4	02/15/18 13:46	
Magnesium	ug/L	ND	50.0	6.3	02/15/18 13:46	
Potassium	ug/L	ND	100	16.5	02/15/18 13:46	
Sodium	ug/L	ND	100	13.5	02/15/18 13:46	

LABORATORY CONTROL SAMPLE: 6439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	100	99.6	100	80-120	
Calcium	ug/L	1000	981	98	80-120	
Magnesium	ug/L	1000	1020	102	80-120	
Potassium	ug/L	1000	991	99	80-120	
Sodium	ug/L	1000	1030	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6550 6551

Parameter	Units	261658002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	100	100	98.5	100	98	100	75-125	2	20	
Calcium	ug/L		1000	1000	9550	9770	95	117	75-125	2	20	
Magnesium	ug/L		1000	1000	2690	2760	99	106	75-125	3	20	
Potassium	ug/L		1000	1000	4070	4160	98	107	75-125	2	20	
Sodium	ug/L		1000	1000	5780	5950	95	112	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant Kraft AP
Pace Project No.: 261658

QC Batch: 397694 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 261658002, 261658004, 261658006, 261658008, 261658010, 261658012, 261658014, 261658016

METHOD BLANK: 2205796 Matrix: Water
Associated Lab Samples: 261658002, 261658004, 261658006, 261658008, 261658010, 261658012, 261658014, 261658016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/12/18 19:47	

LABORATORY CONTROL SAMPLE: 2205797

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	256	102	90-110	

SAMPLE DUPLICATE: 2205798

Parameter	Units	261545001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	233	227	3	5	

SAMPLE DUPLICATE: 2205799

Parameter	Units	261658002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	106	94.0	12	5	D6

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QUALITY CONTROL DATA

Project: Plant Kraft AP
Pace Project No.: 261658

QC Batch: 859 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 261658002, 261658004, 261658006, 261658008, 261658010, 261658012, 261658014, 261658016

METHOD BLANK: 6241 Matrix: Water
Associated Lab Samples: 261658002, 261658004, 261658006, 261658008, 261658010, 261658012, 261658014, 261658016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	02/12/18 13:45	
Sulfate	mg/L	ND	1.0	0.017	02/12/18 13:45	

LABORATORY CONTROL SAMPLE: 6242

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.9	99	90-110	
Sulfate	mg/L	10	9.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6243 6244

Parameter	Units	261599002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	139	10	10	90.7	90.7	-484	-483	90-110	0	15	E,M1
Sulfate	mg/L	78.7	10	10	76.2	76.3	-25	-24	90-110	0	15	E,M1

MATRIX SPIKE SAMPLE: 6245

Parameter	Units	261599004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1720	10	318	-14000	90-110	E,M1
Sulfate	mg/L	319J	10	205	-1140	90-110	E,M1

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-08 **Lab ID: 261658001** Collected: 02/08/18 13:30 Received: 02/09/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.360 ± 0.240 (0.357) C:85% T:NA**	pCi/L	02/16/18 08:16	13982-63-3	
Radium-228	EPA 9320	**0.567 ± 0.376 (0.721) C:79% T:87%**	pCi/L	02/23/18 13:19	15262-20-1	
Total Radium	Total Radium Calculation	**0.927 ± 0.616 (1.08)**	pCi/L	03/02/18 13:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-12 **Lab ID: 261658003** Collected: 02/08/18 15:05 Received: 02/09/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**4.17 ± 0.951 (0.395) C:76% T:NA**	pCi/L	02/16/18 08:16	13982-63-3	
Radium-228	EPA 9320	**1.40 ± 0.493 (0.713) C:82% T:84%**	pCi/L	02/23/18 13:19	15262-20-1	
Total Radium	Total Radium Calculation	**5.57 ± 1.44 (1.11)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-09 **Lab ID: 261658005** Collected: 02/08/18 09:45 Received: 02/09/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.41 ± 0.485 (0.456) C:80% T:NA**	pCi/L	02/16/18 08:16	13982-63-3	
Radium-228	EPA 9320	**0.428 ± 0.367 (0.744) C:79% T:87%**	pCi/L	02/23/18 13:19	15262-20-1	
Total Radium	Total Radium Calculation	**1.84 ± 0.852 (1.20)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-10 **Lab ID: 261658007** Collected: 02/08/18 11:50 Received: 02/09/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.581 ± 0.302 (0.387) C:84% T:NA**	pCi/L	02/16/18 08:16	13982-63-3	
Radium-228	EPA 9320	**0.673 ± 0.410 (0.772) C:79% T:84%**	pCi/L	02/23/18 13:19	15262-20-1	
Total Radium	Total Radium Calculation	**1.25 ± 0.712 (1.16)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: EQBL020818 **Lab ID: 261658009** Collected: 02/08/18 16:15 Received: 02/09/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.213 ± 0.199 (0.357) C:83% T:NA**	pCi/L	02/16/18 08:16	13982-63-3	
Radium-228	EPA 9320	**0.323 ± 0.463 (0.998) C:78% T:83%**	pCi/L	02/23/18 16:31	15262-20-1	
Total Radium	Total Radium Calculation	**0.536 ± 0.662 (1.36)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: FBL020818 **Lab ID: 261658011** Collected: 02/08/18 16:30 Received: 02/09/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0315 ± 0.240 (0.618) C:69% T:NA**	pCi/L	02/16/18 08:16	13982-63-3	
Radium-228	EPA 9320	**0.279 ± 0.393 (0.845) C:81% T:86%**	pCi/L	02/23/18 16:31	15262-20-1	
Total Radium	Total Radium Calculation	**0.311 ± 0.633 (1.46)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: KMW-11 **Lab ID: 261658013** Collected: 02/08/18 17:20 Received: 02/09/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.13 ± 0.597 (0.402) C:84% T:NA**	pCi/L	02/16/18 08:16	13982-63-3	
Radium-228	EPA 9320	**0.375 ± 0.449 (0.954) C:80% T:89%**	pCi/L	02/23/18 16:31	15262-20-1	
Total Radium	Total Radium Calculation	**2.51 ± 1.05 (1.36)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

Sample: Dup-02 **Lab ID: 261658015** Collected: 02/08/18 00:00 Received: 02/09/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.08 ± 0.612 (0.417) C:74% T:NA**	pCi/L	02/16/18 08:16	13982-63-3	
Radium-228	EPA 9320	**3.42 ± 0.861 (0.880) C:79% T:87%**	pCi/L	02/23/18 16:31	15262-20-1	
Total Radium	Total Radium Calculation	**5.50 ± 1.47 (1.30)**	pCi/L	03/02/18 13:27	7440-14-4	

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(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

QC Batch: 288045 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 261658001, 261658003, 261658005, 261658007, 261658009, 261658011, 261658013, 261658015

METHOD BLANK: 1411778 Matrix: Water
Associated Lab Samples: 261658001, 261658003, 261658005, 261658007, 261658009, 261658011, 261658013, 261658015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.233 ± 0.202 (0.346) C:86% T:NA	pCi/L	02/16/18 08:16	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261658

QC Batch: 288055 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 261658001, 261658003, 261658005, 261658007, 261658009, 261658011, 261658013, 261658015

METHOD BLANK: 1411785 Matrix: Water
Associated Lab Samples: 261658001, 261658003, 261658005, 261658007, 261658009, 261658011, 261658013, 261658015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.738 ± 0.410 (0.739) C:78% T:78%	pCi/L	02/23/18 13:19	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: Plant Kraft AP
Pace Project No.: 261658

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-GA	Pace Analytical Services - Atlanta, GA
PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft AP
Pace Project No.: 261658

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
261658002	**KMW-08**	EPA 3005A	911	EPA 6020B	1093
261658004	**KMW-12**	EPA 3005A	911	EPA 6020B	1093
261658006	**KMW-09**	EPA 3005A	911	EPA 6020B	1093
261658008	**KMW-10**	EPA 3005A	911	EPA 6020B	1093
261658010	**EQBL020818**	EPA 3005A	911	EPA 6020B	1093
261658012	**FBL020818**	EPA 3005A	911	EPA 6020B	1093
261658014	**KMW-11**	EPA 3005A	911	EPA 6020B	1093
261658016	**Dup-02**	EPA 3005A	911	EPA 6020B	1093
261658001	**KMW-08**	EPA 9315	288045		
261658003	**KMW-12**	EPA 9315	288045		
261658005	**KMW-09**	EPA 9315	288045		
261658007	**KMW-10**	EPA 9315	288045		
261658009	**EQBL020818**	EPA 9315	288045		
261658011	**FBL020818**	EPA 9315	288045		
261658013	**KMW-11**	EPA 9315	288045		
261658015	**Dup-02**	EPA 9315	288045		
261658001	**KMW-08**	EPA 9320	288055		
261658003	**KMW-12**	EPA 9320	288055		
261658005	**KMW-09**	EPA 9320	288055		
261658007	**KMW-10**	EPA 9320	288055		
261658009	**EQBL020818**	EPA 9320	288055		
261658011	**FBL020818**	EPA 9320	288055		
261658013	**KMW-11**	EPA 9320	288055		
261658015	**Dup-02**	EPA 9320	288055		
261658001	**KMW-08**	Total Radium Calculation	289957		
261658003	**KMW-12**	Total Radium Calculation	289957		
261658005	**KMW-09**	Total Radium Calculation	289957		
261658007	**KMW-10**	Total Radium Calculation	289957		
261658009	**EQBL020818**	Total Radium Calculation	289957		
261658011	**FBL020818**	Total Radium Calculation	289957		
261658013	**KMW-11**	Total Radium Calculation	289957		
261658015	**Dup-02**	Total Radium Calculation	289957		
261658004	**KMW-12**	SM 2320B	1487		
261658006	**KMW-09**	SM 2320B	1487		
261658008	**KMW-10**	SM 2320B	1237		
261658014	**KMW-11**	SM 2320B	1237		
261658016	**Dup-02**	SM 2320B	1237		
261658002	**KMW-08**	SM 2320B	1527		
261658010	**EQBL020818**	SM 2320B	1464		
261658012	**FBL020818**	SM 2320B	1464		
261658002	**KMW-08**	SM 2540C	397694		
261658004	**KMW-12**	SM 2540C	397694		
261658006	**KMW-09**	SM 2540C	397694		
261658008	**KMW-10**	SM 2540C	397694		
261658010	**EQBL020818**	SM 2540C	397694		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft AP
Pace Project No.: 261658

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
261658012	**FBL020818**	SM 2540C	397694		
261658014	**KMW-11**	SM 2540C	397694		
261658016	**Dup-02**	SM 2540C	397694		
261658002	**KMW-08**	EPA 300.0	859		
261658004	**KMW-12**	EPA 300.0	859		
261658006	**KMW-09**	EPA 300.0	859		
261658008	**KMW-10**	EPA 300.0	859		
261658010	**EQBL020818**	EPA 300.0	859		
261658012	**FBL020818**	EPA 300.0	859		
261658014	**KMW-11**	EPA 300.0	859		
261658016	**Dup-02**	EPA 300.0	859		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power ~~Coal Combustion Residuals~~ HSRA	Report To:	~~Joju Abraham~~ Lea Millet	Attention:	
Address:	2480 Maner Road	Copy To:	Stephen Willson, Trent Goodwin	Company Name:	
Atlanta, GA 30339				Address:	
Email:	jabraham@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(404)506-7239 Fax	Project Name:	Plant Kraft AP	Pace Project Manager:	betsy.mcdaniel@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	329

Regulatory Agency: | State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	Radium 226/228	Metals 6020 (As,Ca,Mg,K,Na)	Metals 6020 (As only)	Carb Alk, Bicarb Alk, TDS, C	PAH 8270/SIM	Residual Chlorine (Y/N)	
1	KMW-08					2/8/18	1330		5	X			X						X	X	X	X			1/2
2	KMW-12					2/8/18	1505		4	X			X						X	X		X			3/4
3	KMW-09					2/8/18	0945		5	X			X						X	X	X	X			5/6
4	KMW-10					2/8/18	1150		5	X			X						X	X	X	X			7/8
5	EQBL020818					2/8/18	1615		4	X			X						X	X		X			9/10
6	FBL 020818					2/8/18	1630		4	X			X						X	X		X			11/12
7	KMW-11					2/8/18	1720		4	X			X						X	X		X			13/14
8	Dup-02					2/8/18	/		4	X			X						X	X		X			15/16
9																									
10																									
11																									
12																									

WO# : 261658

261658

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		2/8/18	1700	To Fedex			
				M Zalman	2/9/18	0930	
							0.2 Y N Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Forrest Howard

SIGNATURE of SAMPLER:

DATE Signed: 2/8/18

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

FedEx 7896 6396 8760

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project #

WO#: 261658

PM: BM Due Date: 02/16/18

CLIENT: GAPower

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used THR 83 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.2 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 2/9/18 MR

Temp should be above freezing to 6°C

			Comments:
Chain of Custody Present:	☑Yes	☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No ☐N/A	7.
Sufficient Volume:	☑Yes	☐No ☐N/A	8.
Correct Containers Used:	☑Yes	☐No ☐N/A	9.
-Pace Containers Used:	☑Yes	☐No ☐N/A	
Containers Intact:	☑Yes	☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No ☑N/A	11.
Sample Labels match COC:	☑Yes	☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: GW			
All containers needing preservation have been checked.	☑Yes	☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No ☑N/A	15.
Trip Blank Present:	☐Yes	☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 07, 2018

Lauren Petty
Southern Company Services, Inc.
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: Plant Kraft
Pace Project No.: 261705

Dear Lauren Petty:
Enclosed are the analytical results for sample(s) received by the laboratory on February 12, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kevin Stephenson, Resolute Environmental & Water Resources Consulting, LLC
Stephen Wilson, Resolute Environmental & Water Resources Consulting, LLC

REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Kraft
Pace Project No.: 261705

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Kraft
Pace Project No.: 261705

Lab ID	Sample ID	Matrix	Date Collected	Date Received
261705001	**MW-15DR**	Water	02/09/18 11:30	02/12/18 08:15
261705002	**MW-15DR**	Water	02/09/18 11:30	02/12/18 08:15
261705003	**EQBL020918**	Water	02/09/18 12:00	02/12/18 08:15

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(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Kraft
Pace Project No.: 261705

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
261705001	**MW-15DR**	EPA 904.0	JLW	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
261705002	**MW-15DR**	EPA 8270 by SIM	PKS	7	PASI-C
261705003	**EQBL020918**	EPA 8270 by SIM	PKS	7	PASI-C

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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Kraft
Pace Project No.: 261705

Sample: MW-15DR **Lab ID: 261705002** Collected: 02/09/18 11:30 Received: 02/12/18 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	**0.00052**	mg/L	0.000050	0.000050	1	02/15/18 17:25	02/16/18 19:54	56-55-3	R1
Benzo(a)pyrene	ND	mg/L	0.00020	0.00020	1	02/15/18 17:25	02/16/18 19:54	50-32-8	R1
Benzo(b)fluoranthene	**0.00022**	mg/L	0.000050	0.000050	1	02/15/18 17:25	02/16/18 19:54	205-99-2	R1
Indeno(1,2,3-cd)pyrene	**0.000052**	mg/L	0.000050	0.000050	1	02/15/18 17:25	02/16/18 19:54	193-39-5	M1,R1
Surrogates									
Nitrobenzene-d5 (S)	22	%	30-150		1	02/15/18 17:25	02/16/18 19:54	4165-60-0	S2
2-Fluorobiphenyl (S)	51	%	30-150		1	02/15/18 17:25	02/16/18 19:54	321-60-8	
Terphenyl-d14 (S)	28	%	30-150		1	02/15/18 17:25	02/16/18 19:54	1718-51-0	S0

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant Kraft
Pace Project No.: 261705

Sample: EQBL020918 **Lab ID: 261705003** Collected: 02/09/18 12:00 Received: 02/12/18 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	ND	mg/L	0.000048	0.000048	1	02/15/18 17:25	02/16/18 21:03	56-55-3	
Benzo(a)pyrene	ND	mg/L	0.00019	0.00019	1	02/15/18 17:25	02/16/18 21:03	50-32-8	
Benzo(b)fluoranthene	ND	mg/L	0.000048	0.000048	1	02/15/18 17:25	02/16/18 21:03	205-99-2	
Indeno(1,2,3-cd)pyrene	ND	mg/L	0.000048	0.000048	1	02/15/18 17:25	02/16/18 21:03	193-39-5	
Surrogates									
Nitrobenzene-d5 (S)	77	%	30-150		1	02/15/18 17:25	02/16/18 21:03	4165-60-0	
2-Fluorobiphenyl (S)	77	%	30-150		1	02/15/18 17:25	02/16/18 21:03	321-60-8	
Terphenyl-d14 (S)	80	%	30-150		1	02/15/18 17:25	02/16/18 21:03	1718-51-0	

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(770)734-4200

QUALITY CONTROL DATA

Project: Plant Kraft
Pace Project No.: 261705

QC Batch: 398269
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 Water CPAH by SIM MSSV 3510
Associated Lab Samples: 261705002, 261705003

METHOD BLANK: 2209247 Matrix: Water
Associated Lab Samples: 261705002, 261705003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(a)anthracene	mg/L	ND	0.000050	0.000050	02/16/18 18:21	
Benzo(a)pyrene	mg/L	ND	0.00020	0.00020	02/16/18 18:21	
Benzo(b)fluoranthene	mg/L	ND	0.000050	0.000050	02/16/18 18:21	
Indeno(1,2,3-cd)pyrene	mg/L	ND	0.000050	0.000050	02/16/18 18:21	
2-Fluorobiphenyl (S)	%	75	30-150		02/16/18 18:21	
Nitrobenzene-d5 (S)	%	82	30-150		02/16/18 18:21	
Terphenyl-d14 (S)	%	96	30-150		02/16/18 18:21	

LABORATORY CONTROL SAMPLE: 2209248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(a)anthracene	mg/L	.001	0.00091	91	51-134	
Benzo(a)pyrene	mg/L	.001	0.00088	88	58-133	
Benzo(b)fluoranthene	mg/L	.001	0.00097	97	42-143	
Indeno(1,2,3-cd)pyrene	mg/L	.001	0.00092	92	46-121	
2-Fluorobiphenyl (S)	%			72	30-150	
Nitrobenzene-d5 (S)	%			79	30-150	
Terphenyl-d14 (S)	%			97	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2209249 2209250

Parameter	Units	261705002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzo(a)anthracene	mg/L	0.00052	.002	.002	0.0021	0.0013	78	39	18-104	47	30	R1
Benzo(a)pyrene	mg/L	ND	.002	.002	0.00085	0.00050	36	19	14-121	53	30	R1
Benzo(b)fluoranthene	mg/L	0.00022	.002	.002	0.0011	0.00059	43	18	11-116	59	30	R1
Indeno(1,2,3-cd)pyrene	mg/L	0.000052	.002	.002	0.00035	0.00022	15	8	10-120	49	30	M1,R1
2-Fluorobiphenyl (S)	%						68	74	30-150			
Nitrobenzene-d5 (S)	%						14	14	30-150			S2
Terphenyl-d14 (S)	%						37	34	30-150			

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 261705

Sample: MW-15DR **Lab ID: 261705001** Collected: 02/09/18 11:30 Received: 02/12/18 08:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-228	EPA 904.0	**2.27 ± 0.489 (0.723) C:78% T:86%**	pCi/L	02/28/18 11:22	15262-20-1	
Radium-226	EPA 9315	**1.40 ± 0.391 (0.444) C:31% T:NA**	pCi/L	03/02/18 08:05	13982-63-3	
Total Radium	Total Radium Calculation	**3.67 ± 0.880 (1.17)**	pCi/L	03/05/18 10:52	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 261705

QC Batch: 288187 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 261705001

METHOD BLANK: 1412363 Matrix: Water
Associated Lab Samples: 261705001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.249 ± 0.291 (0.611) C:81% T:92%	pCi/L	02/28/18 11:18	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 261705

QC Batch: 289267 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 261705001

METHOD BLANK: 1417373 Matrix: Water
Associated Lab Samples: 261705001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0779 ± 0.131 (0.292) C:87% T:NA	pCi/L	03/01/18 08:44	

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QUALIFIERS

Project: Plant Kraft
Pace Project No.: 261705

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte
PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S2	Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft
Pace Project No.: 261705

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
261705002	**MW-15DR**	EPA 3510	398269	EPA 8270 by SIM	398448
261705003	**EQBL020918**	EPA 3510	398269	EPA 8270 by SIM	398448
261705001	**MW-15DR**	EPA 904.0	288187		
261705001	**MW-15DR**	EPA 9315	289267		
261705001	**MW-15DR**	Total Radium Calculation	290090		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information: NORTHERN AREA	Section B Required Project Information:	Section C Invoice Information:
Company: Georgia Power ~~Coal Combustion Residuals~~	Report To: Joju Abraham, LAUREN PETTY, LEANNE STEPHEN WILSON, TRENT GODWIN	Attention:
Address: 2480 Maner Road	Copy To:	Company Name:
Atlanta, GA 30339	Purchase Order #:	Address:
Email: jabraham@southernco.com	Project Name: Plant Kraft ~~AP~~ NORTHERN AREA	Pace Quote:
Phone: (404)506-7239 Fax	Project #:	Pace Project Manager: betsy.mcdaniel@pacelabs.com,
Requested Due Date:		Pace Profile #: 329

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Radium 226/228	Metals 6020 (As,Ca,Mg,K,Na)	Metals 6020 (Ae only)	Carb Alk, Bicarb Alk, TDS, C	PAH 8270/SIM	Residual Chlorine (Y/N)
1	MW-15 DR (MS/MSD)	WT	G			02/09/18	1130		8	6		2							2				6	1/2
2	EQBL020918	DW	G			02/09/18	1200		2	2													2	3
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

DEIONIZED WATER

* PAH SUBSET:
IDENO PYRNE
SERIES
HISTORICALLY
USED AT
PLANT KRAFT
NORTHERN
AREA

WO# : 261705

261705

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	MICHAEL PATINKIN	02/12/18	0815	MDahlman	2/12/18	0815

SAMPLE CONDITIONS

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
0.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MICHAEL PATINKIN

SIGNATURE of SAMPLER: DATE Signed: 02/12/18

Client.

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

Project #

WO# : 261705

PM: BM Due Date: 02/19/18

CLIENT: GAPower

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used THR083 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.5 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 2/12/18 MR

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A	1.	
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.	
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.	
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.	
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.	
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.	
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.	
Sufficient Volume:	☑Yes	☐No	☐N/A	8.	
Correct Containers Used:	☑Yes	☐No	☐N/A	9.	
-Pace Containers Used:	☑Yes	☐No	☐N/A		
Containers Intact:	☑Yes	☐No	☐N/A	10.	
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.	
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.	
-Includes date/time/ID/Analysis Matrix:	W				
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No		Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.	
Trip Blank Present:	☐Yes	☐No	☑N/A	16.	
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A		
Pace Trip Blank Lot # (if purchased):					

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i e out of hold, incorrect preservative, out of temp incorrect containers)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 19, 2018

Lauren Petty
Southern Company Services, Inc.
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: Plant Kraft AP
Pace Project No.: 261999

Dear Lauren Petty:
Enclosed are the analytical results for sample(s) received by the laboratory on February 20, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kevin Stephenson, Resolute Environmental & Water Resources Consulting, LLC
Stephen Wilson, Resolute Environmental & Water Resources Consulting, LLC

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(770)734-4200

CERTIFICATIONS

Project: Plant Kraft AP
Pace Project No.: 261999

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Texas Certification #: T104704397-08-TX
Virginia Certification #: 460204

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Kraft AP
Pace Project No.: 261999

Lab ID	Sample ID	Matrix	Date Collected	Date Received
261999001	**KMW-03**	Water	02/19/18 13:30	02/20/18 09:30
261999002	**KMW-03**	Water	02/19/18 13:30	02/20/18 09:30
261999003	**KMW-13**	Water	02/19/18 15:05	02/20/18 09:30
261999004	**KMW-13**	Water	02/19/18 15:05	02/20/18 09:30

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Kraft AP
Pace Project No.: 261999

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
261999001	**KMW-03**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
261999002	**KMW-03**	EPA 6020B	CSW	4	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	MJP	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261999003	**KMW-13**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
261999004	**KMW-13**	EPA 6020B	CSW	4	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	MJP	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261999

Sample: KMW-03 **Lab ID: 261999002** Collected: 02/19/18 13:30 Received: 02/20/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Calcium	**39800**	ug/L	25000	2020	50	02/22/18 10:25	02/24/18 01:10	7440-70-2	
Magnesium	**13200**	ug/L	2500	314	50	02/22/18 10:25	02/24/18 01:10	7439-95-4	
Potassium	**17100**	ug/L	1000	165	10	02/22/18 10:25	02/27/18 19:31	7440-09-7	
Sodium	**8320**	ug/L	100	13.5	1	02/22/18 10:25	02/24/18 01:05	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**166**	mg/L	20.0	20.0	1		02/26/18 15:54		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		02/26/18 15:54		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**232**	mg/L	25.0	25.0	1		02/25/18 10:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**10.5**	mg/L	0.25	0.024	1		02/23/18 21:12	16887-00-6	M1
Sulfate	**25.2**	mg/L	5.0	0.085	5		03/03/18 10:40	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261999

Sample: KMW-13 **Lab ID: 261999004** Collected: 02/19/18 15:05 Received: 02/20/18 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Calcium	**46500**	ug/L	5000	404	10	02/22/18 10:25	02/27/18 19:42	7440-70-2	
Magnesium	**9840**	ug/L	50.0	6.3	1	02/22/18 10:25	02/24/18 01:28	7439-95-4	
Potassium	**6550**	ug/L	100	16.5	1	02/22/18 10:25	02/24/18 01:28	7440-09-7	
Sodium	**160000**	ug/L	5000	674	50	02/22/18 10:25	02/28/18 16:27	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**65.0**	mg/L	20.0	20.0	1		02/26/18 16:02		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		02/26/18 16:02		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**706**	mg/L	50.0	50.0	1		02/25/18 10:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**205**	mg/L	5.0	0.48	20		03/03/18 11:02	16887-00-6	
Sulfate	**174**	mg/L	20.0	0.34	20		03/03/18 11:02	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Kraft AP
Pace Project No.: 261999

QC Batch: 1353
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Associated Lab Samples: 261999002, 261999004

METHOD BLANK: 8341 Matrix: Water
Associated Lab Samples: 261999002, 261999004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	ug/L	ND	500	40.4	02/23/18 22:07	
Magnesium	ug/L	ND	50.0	6.3	02/23/18 22:07	
Potassium	ug/L	ND	100	16.5	02/27/18 17:30	
Sodium	ug/L	ND	100	13.5	02/23/18 22:07	

LABORATORY CONTROL SAMPLE: 8342

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	1000	1070	107	80-120	
Magnesium	ug/L	1000	1080	108	80-120	
Potassium	ug/L	1000	1080	108	80-120	
Sodium	ug/L	1000	1060	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8966 8967

Parameter	Units	261937009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	50100	1000	1000	53200	51200	306	109	75-125	4	20	
Magnesium	ug/L				23600	23700				1	20	
Potassium	ug/L	3770	1000	1000	4730	4840	96	107	75-125	2	20	
Sodium	ug/L				36000	36800				2	20	

SAMPLE DUPLICATE: 8979

Parameter	Units	261999004 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium	ug/L	46500	48300	4	20	
Magnesium	ug/L	9840	9460	4	20	
Potassium	ug/L	6550	6390	2	20	
Sodium	ug/L	160000	157000	2	20	

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QUALITY CONTROL DATA

Project: Plant Kraft AP
Pace Project No.: 261999

QC Batch: 399633 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 261999002, 261999004

METHOD BLANK: 2216623 Matrix: Water
Associated Lab Samples: 261999002, 261999004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	2.5	2.5	02/25/18 10:19	

LABORATORY CONTROL SAMPLE: 2216624

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	228	91	90-110	

SAMPLE DUPLICATE: 2216625

Parameter	Units	92373944008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	176	172	2	5	

SAMPLE DUPLICATE: 2216626

Parameter	Units	92373944018 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		5	

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QUALITY CONTROL DATA

Project: Plant Kraft AP
Pace Project No.: 261999

QC Batch: 1520 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 261999002, 261999004

METHOD BLANK: 9129 Matrix: Water
Associated Lab Samples: 261999002, 261999004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	02/23/18 19:47	
Sulfate	mg/L	ND	1.0	0.017	02/23/18 19:47	

LABORATORY CONTROL SAMPLE: 9130

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	9.8	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9134 9135

Parameter	Units	261999002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.5	10	10	18.8	18.8	83	83	90-110	0	15	M1
Sulfate	mg/L	25.2	10	10	33.3	33.4	82	82	90-110	0	15	E,M1

MATRIX SPIKE SAMPLE: 9296

Parameter	Units	261999004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	205	10	113	-926	90-110	E
Sulfate	mg/L	174	10	141	-338	90-110	E

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261999

Sample: KMW-03 **Lab ID: 261999001** Collected: 02/19/18 13:30 Received: 02/20/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.30 ± 0.407 (0.357) C:79% T:NA**	pCi/L	03/01/18 10:19	13982-63-3	
Radium-228	EPA 9320	**1.21 ± 0.527 (0.834) C:74% T:80%**	pCi/L	03/06/18 13:24	15262-20-1	
Total Radium	Total Radium Calculation	**2.51 ± 0.934 (1.19)**	pCi/L	03/09/18 12:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261999

Sample: KMW-13 **Lab ID: 261999003** Collected: 02/19/18 15:05 Received: 02/20/18 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.864 ± 0.322 (0.302) C:78% T:NA**	pCi/L	03/01/18 10:19	13982-63-3	
Radium-228	EPA 9320	**0.349 ± 0.388 (0.808) C:74% T:82%**	pCi/L	03/06/18 13:24	15262-20-1	
Total Radium	Total Radium Calculation	**1.21 ± 0.710 (1.11)**	pCi/L	03/09/18 12:44	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261999

QC Batch: 289268 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 261999001, 261999003

METHOD BLANK: 1417374 Matrix: Water
Associated Lab Samples: 261999001, 261999003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.206 ± 0.148 (0.216) C:92% T:NA	pCi/L	03/01/18 10:12	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261999

QC Batch: 289271 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 261999001, 261999003

METHOD BLANK: 1417377 Matrix: Water
Associated Lab Samples: 261999001, 261999003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.557 ± 0.408 (0.796) C:80% T:87%	pCi/L	03/06/18 13:23	

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QUALIFIERS

Project: Plant Kraft AP
Pace Project No.: 261999

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-GA	Pace Analytical Services - Atlanta, GA
PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft AP
Pace Project No.: 261999

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
261999002	**KMW-03**	EPA 3005A	1353	EPA 6020B	1565
261999004	**KMW-13**	EPA 3005A	1353	EPA 6020B	1565
261999001	**KMW-03**	EPA 9315	289268		
261999003	**KMW-13**	EPA 9315	289268		
261999001	**KMW-03**	EPA 9320	289271		
261999003	**KMW-13**	EPA 9320	289271		
261999001	**KMW-03**	Total Radium Calculation	290643		
261999003	**KMW-13**	Total Radium Calculation	290643		
261999002	**KMW-03**	SM 2320B	1620		
261999004	**KMW-13**	SM 2320B	1620		
261999002	**KMW-03**	SM 2540C	399633		
261999004	**KMW-13**	SM 2540C	399633		
261999002	**KMW-03**	EPA 300.0	1520		
261999004	**KMW-13**	EPA 300.0	1520		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A	Section B	Section C
Required Client Information: HSRA	Required Project Information:	Invoice Information:
Company: Georgia Power ~~Coal Combustion Residuals~~	Report To: ~~Jeju Abraham~~ Lee Mullet	Attention:
Address: 2480 Maner Road	Copy To: Stephen Willson (Results) Trent Godwin (Results)	Company Name: GPC Environmental Affairs
Atlanta, GA 30339	Purchase Order #:	Address:
Email: ~~jabraham@southernco.com~~ forrest howard@southernco.com	Project Name: Plant Kraft AP	Pace Quote:
Phone: (404)506-7239 Fax	Project #:	Pace Project Manager: betsy.mcdaniel@pacelabs.com,
Requested Due Date:		Pace Profile #: 329

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): Radium 226/228	Metals 6020 (As,Ca,Mg,K,Na)	Metals 6020 (As only)	Carb Alk, Bicarb Alk, TDS, C	PAH 8270/SIM	Residual Chlorine (Y/N)	
1	KMW-03			/	/	2/19/18	1330		4	1		3							X	X		X			1/2
2	KMW-13			/	/	2/19/18	1505		4	1		3							X	X		X			3/4
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

WO#: 261999

261999

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
		2/18/18	1700	To FedEx		
				M Zalman	2/20/18	0930

SAMPLE CONDITIONS			
TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1.1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Forrest Howard

SIGNATURE of SAMPLER: DATE Signed: 2-19-18

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

Project #

WO#: 261999

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other ____

Tracking #: 789796428 6028

PM: BM Due Date: 02/27/18

CLIENT: GAPower

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other ____

Thermometer Used 83 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.1 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 2/20/18 MR

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A	1.	
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.	
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.	
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.	
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.	
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.	
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.	
Sufficient Volume:	☑Yes	☐No	☐N/A	8.	
Correct Containers Used:	☑Yes	☐No	☐N/A	9.	
-Pace Containers Used:	☑Yes	☐No	☐N/A		
Containers Intact:	☑Yes	☐No	☐N/A	10.	
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.	
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	☑Yes	☐No	☐N/A	12.	
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☑Yes	☐No		Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.	
Trip Blank Present:	☐Yes	☐No	☑N/A	16.	
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A		
Pace Trip Blank Lot # (if purchased):					

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: ____ Date/Time: ____

Comments/ Resolution: ____

Project Manager Review: ____ **Date:** ____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples a copy of this form will be sent to the North Carolina DEHNR Certification Office (i e out of hold, incorrect preservative out of temp incorrect containers)

F-ALL-C003rev 3 11 September 2006

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 09, 2018

Lauren Petty
Southern Company Services, Inc.
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Dear Lauren Petty:
Enclosed are the analytical results for sample(s) received by the laboratory on February 07, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kevin Stephenson, Resolute Environmental & Water Resources Consulting, LLC
Stephen Wilson, Resolute Environmental & Water Resources Consulting, LLC

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CERTIFICATIONS

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Texas Certification #: T104704397-08-TX
Virginia Certification #: 460204

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Lab ID	Sample ID	Matrix	Date Collected	Date Received
261511001	**KMW-04**	Water	02/06/18 15:00	02/07/18 09:35
261511002	**KMW-04**	Water	02/06/18 15:00	02/07/18 09:35
261511003	**KMW-06**	Water	02/06/18 16:30	02/07/18 09:35
261511004	**KMW-06**	Water	02/06/18 16:30	02/07/18 09:35
261511005	**KMW-05**	Water	02/06/18 13:55	02/07/18 09:35
261511006	**KMW-05**	Water	02/06/18 13:55	02/07/18 09:35
261511007	**KMW-07**	Water	02/06/18 16:20	02/07/18 09:35
261511008	**KMW-07**	Water	02/06/18 16:20	02/07/18 09:35

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SAMPLE ANALYTE COUNT

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
261511001	**KMW-04**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261511002	**KMW-04**	EPA 6020B	KLH	5	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	NAL	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261511003	**KMW-06**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261511004	**KMW-06**	EPA 6020B	CSW, KLH	5	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	NAL	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261511005	**KMW-05**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261511006	**KMW-05**	EPA 6020B	CSW, KLH	5	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	NAL	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261511007	**KMW-07**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261511008	**KMW-07**	EPA 6020B	CSW, KLH	5	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	NAL	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA

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ANALYTICAL RESULTS

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Sample: KMW-04 **Lab ID: 261511002** Collected: 02/06/18 15:00 Received: 02/07/18 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	**3.2J**	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 13:57	7440-38-2	
Calcium	**53400**	ug/L	25000	2020	50	02/15/18 08:13	02/15/18 14:03	7440-70-2	
Magnesium	**9400**	ug/L	50.0	6.3	1	02/15/18 08:13	02/15/18 13:57	7439-95-4	
Potassium	**9480**	ug/L	100	16.5	1	02/15/18 08:13	02/15/18 13:57	7440-09-7	
Sodium	**310000**	ug/L	5000	674	50	02/15/18 08:13	02/15/18 14:03	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**36.0**	mg/L	20.0	20.0	1		02/09/18 12:01		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		02/09/18 12:01		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**1140**	mg/L	125	125	1		02/09/18 10:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**406**	mg/L	5.0	0.48	20		02/22/18 15:55	16887-00-6	M1
Sulfate	**210**	mg/L	20.0	0.34	20		02/22/18 15:55	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Sample: KMW-06 **Lab ID: 261511004** Collected: 02/06/18 16:30 Received: 02/07/18 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	**2.6J**	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 14:09	7440-38-2	
Calcium	**205000**	ug/L	25000	2020	50	02/15/18 08:13	02/15/18 14:15	7440-70-2	
Magnesium	**57200**	ug/L	2500	314	50	02/15/18 08:13	02/15/18 14:15	7439-95-4	
Potassium	**35400**	ug/L	5000	825	50	02/15/18 08:13	02/15/18 14:15	7440-09-7	
Sodium	**1200000**	ug/L	250000	33700	2500	02/15/18 08:13	02/22/18 13:36	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**5.0**	mg/L	1.0	1.0	1		02/14/18 11:50		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 11:50		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**3740**	mg/L	250	250	1		02/09/18 10:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**1920**	mg/L	25.0	2.4	100		02/22/18 16:15	16887-00-6	
Sulfate	**522**	mg/L	100	1.7	100		02/22/18 16:15	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Sample: KMW-05 **Lab ID: 261511006** Collected: 02/06/18 13:55 Received: 02/07/18 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	**1.2J**	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 14:20	7440-38-2	
Calcium	**116000**	ug/L	25000	2020	50	02/15/18 08:13	02/15/18 14:26	7440-70-2	
Magnesium	**52400**	ug/L	2500	314	50	02/15/18 08:13	02/15/18 14:26	7439-95-4	
Potassium	**31400**	ug/L	5000	825	50	02/15/18 08:13	02/15/18 14:26	7440-09-7	
Sodium	**1080000**	ug/L	250000	33700	2500	02/15/18 08:13	02/22/18 13:42	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**7.0**	mg/L	1.0	1.0	1		02/14/18 12:03		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:03		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**3010**	mg/L	250	250	1		02/09/18 10:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**1660**	mg/L	25.0	2.4	100		02/22/18 16:36	16887-00-6	
Sulfate	**392J**	mg/L	100	1.7	100		02/22/18 16:36	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Sample: KMW-07 **Lab ID: 261511008** Collected: 02/06/18 16:20 Received: 02/07/18 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	**2.5J**	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 14:32	7440-38-2	
Calcium	**44200**	ug/L	25000	2020	50	02/15/18 08:13	02/15/18 14:37	7440-70-2	
Magnesium	**17200**	ug/L	2500	314	50	02/15/18 08:13	02/15/18 14:37	7439-95-4	
Potassium	**20000**	ug/L	5000	825	50	02/15/18 08:13	02/15/18 14:37	7440-09-7	
Sodium	**547000**	ug/L	25000	3370	250	02/15/18 08:13	02/22/18 13:48	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:09		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:09		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**1740**	mg/L	250	250	1		02/09/18 10:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**771**	mg/L	25.0	2.4	100		02/22/18 16:57	16887-00-6	
Sulfate	**281J**	mg/L	100	1.7	100		02/22/18 16:57	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

QC Batch: 911 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 261511002, 261511004, 261511006, 261511008

METHOD BLANK: 6438 Matrix: Water
Associated Lab Samples: 261511002, 261511004, 261511006, 261511008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	ND	5.0	0.52	02/15/18 13:46	
Calcium	ug/L	ND	500	40.4	02/15/18 13:46	
Magnesium	ug/L	ND	50.0	6.3	02/15/18 13:46	
Potassium	ug/L	ND	100	16.5	02/15/18 13:46	
Sodium	ug/L	ND	100	13.5	02/15/18 13:46	

LABORATORY CONTROL SAMPLE: 6439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	100	99.6	100	80-120	
Calcium	ug/L	1000	981	98	80-120	
Magnesium	ug/L	1000	1020	102	80-120	
Potassium	ug/L	1000	991	99	80-120	
Sodium	ug/L	1000	1030	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6550 6551

Parameter	Units	261658002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	100	100	98.5	100	98	100	75-125	2	20	
Calcium	ug/L		1000	1000	9550	9770	95	117	75-125	2	20	
Magnesium	ug/L		1000	1000	2690	2760	99	106	75-125	3	20	
Potassium	ug/L		1000	1000	4070	4160	98	107	75-125	2	20	
Sodium	ug/L		1000	1000	5780	5950	95	112	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

QC Batch: 397388 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 261511002, 261511004, 261511006, 261511008

METHOD BLANK: 2203769 Matrix: Water
Associated Lab Samples: 261511002, 261511004, 261511006, 261511008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/09/18 10:50	

LABORATORY CONTROL SAMPLE: 2203770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	236	94	90-110	

SAMPLE DUPLICATE: 2203771

Parameter	Units	92372269006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	506	494	2	5	

SAMPLE DUPLICATE: 2203772

Parameter	Units	92372305006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	59.0	89.0	41	5	D6

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QUALITY CONTROL DATA

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

QC Batch: 694 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 261511002, 261511004, 261511006, 261511008

METHOD BLANK: 5479 Matrix: Water
Associated Lab Samples: 261511002, 261511004, 261511006, 261511008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	02/09/18 06:09	
Sulfate	mg/L	ND	1.0	0.017	02/09/18 06:09	

LABORATORY CONTROL SAMPLE: 5480

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Sulfate	mg/L	10	10.3	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5481 5482

Parameter	Units	261511002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	406	10	10	128	126	-2780	-2800	90-110	1	15	E,M1
Sulfate	mg/L	210	10	10	162	161	-478	-484	90-110	0	15	E,M1

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Sample: KMW-04 **Lab ID: 261511001** Collected: 02/06/18 15:00 Received: 02/07/18 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.590 ± 0.183 (0.187) C:87% T:NA**	pCi/L	03/01/18 19:19	13982-63-3	
Radium-228	EPA 9320	**1.45 ± 0.635 (1.03) C:62% T:79%**	pCi/L	02/22/18 14:33	15262-20-1	
Total Radium	Total Radium Calculation	**2.04 ± 0.818 (1.22)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Sample: KMW-06 **Lab ID: 261511003** Collected: 02/06/18 16:30 Received: 02/07/18 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**3.28 ± 0.695 (0.321) C:86% T:NA**	pCi/L	03/01/18 18:23	13982-63-3	
Radium-228	EPA 9320	**5.58 ± 1.29 (0.967) C:65% T:76%**	pCi/L	02/22/18 14:33	15262-20-1	
Total Radium	Total Radium Calculation	**8.86 ± 1.99 (1.29)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Sample: KMW-05 **Lab ID: 261511005** Collected: 02/06/18 13:55 Received: 02/07/18 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.90 ± 0.517 (0.414) C:79% T:NA**	pCi/L	03/01/18 18:24	13982-63-3	
Radium-228	EPA 9320	**4.37 ± 1.04 (0.865) C:65% T:86%**	pCi/L	02/22/18 14:34	15262-20-1	
Total Radium	Total Radium Calculation	**6.27 ± 1.56 (1.28)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Sample: KMW-07 **Lab ID: 261511007** Collected: 02/06/18 16:20 Received: 02/07/18 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**3.33 ± 0.731 (0.443) C:85% T:NA**	pCi/L	03/01/18 18:25	13982-63-3	
Radium-228	EPA 9320	**7.14 ± 1.56 (1.06) C:69% T:76%**	pCi/L	02/22/18 14:34	15262-20-1	
Total Radium	Total Radium Calculation	**10.5 ± 2.29 (1.50)**	pCi/L	03/02/18 13:27	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

QC Batch: 289706 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 261511001, 261511003, 261511005, 261511007

METHOD BLANK: 1419136 Matrix: Water
Associated Lab Samples: 261511001, 261511003, 261511005, 261511007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.281 ± 0.133 (0.187) C:85% T:NA	pCi/L	03/01/18 19:19	

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

QC Batch: 289609 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 261511001, 261511003, 261511005, 261511007

METHOD BLANK: 1418575 Matrix: Water
Associated Lab Samples: 261511001, 261511003, 261511005, 261511007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0774 ± 0.364 (0.829) C:77% T:83%	pCi/L	02/22/18 14:33	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-GA	Pace Analytical Services - Atlanta, GA
PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft Ash Ponds
Pace Project No.: 261511

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
261511002	**KMW-04**	EPA 3005A	911	EPA 6020B	1093
261511004	**KMW-06**	EPA 3005A	911	EPA 6020B	1093
261511006	**KMW-05**	EPA 3005A	911	EPA 6020B	1093
261511008	**KMW-07**	EPA 3005A	911	EPA 6020B	1093
261511001	**KMW-04**	EPA 9315	289706		
261511003	**KMW-06**	EPA 9315	289706		
261511005	**KMW-05**	EPA 9315	289706		
261511007	**KMW-07**	EPA 9315	289706		
261511001	**KMW-04**	EPA 9320	289609		
261511003	**KMW-06**	EPA 9320	289609		
261511005	**KMW-05**	EPA 9320	289609		
261511007	**KMW-07**	EPA 9320	289609		
261511001	**KMW-04**	Total Radium Calculation	289957		
261511003	**KMW-06**	Total Radium Calculation	289957		
261511005	**KMW-05**	Total Radium Calculation	289957		
261511007	**KMW-07**	Total Radium Calculation	289957		
261511002	**KMW-04**	SM 2320B	773		
261511004	**KMW-06**	SM 2320B	1019		
261511006	**KMW-05**	SM 2320B	1019		
261511008	**KMW-07**	SM 2320B	1019		
261511002	**KMW-04**	SM 2540C	397388		
261511004	**KMW-06**	SM 2540C	397388		
261511006	**KMW-05**	SM 2540C	397388		
261511008	**KMW-07**	SM 2540C	397388		
261511002	**KMW-04**	EPA 300.0	694		
261511004	**KMW-06**	EPA 300.0	694		
261511006	**KMW-05**	EPA 300.0	694		
261511008	**KMW-07**	EPA 300.0	694		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be co

WO# : 261511

261511

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power ~~Coal Combustion Residuals~~	Report To:	~~Joy Abraham~~	Attention:	
Address:	2480 Maner Road 2: HSRA	Copy To:	Lem Millet	Company Name:	
	Atlanta, GA 30339		stephen.wilson, Trent Gordon	Address:	
Email:	jabraham@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(404)506-7239 Fax	Project Name:	Plant Kraft AP	Pace Project Manager:	betsy.mcdaniel@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	329

State / Location
GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): Radium 226/228	Metals 6020 (As,Ca,Mg,K,Na	Metals 6020 (As only)	Carb Alk, Bicarb Alk, TDS, C	PAH 8270/SIM	Residual Chlorine (Y/N)	
1	KMW-04	WT	G			02/06/18	1500		4	1		3							2	1		1			1/2
2	KMW-06	WT	G			02/06/18	1630		4	1		3							2	1		1			3/4
3	KMW-05	WT	G			02/06/18	1355		4	1		3							2	1		1			5/6
4	KMW-07	WT	G			02/06/18	1620		4	1		3							2	1		1			7/8
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	MICHAEL PATINKIN RESOLVE	02/06/18	1700	M Zalman	2/7/18	0935				
							1.3	Y	Y	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MICHAEL PATINKIN, FORREST HOWARD

SIGNATURE of SAMPLER: DATE Signed: 02/06/18

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

Project #

WO# : 261511

PM: BM Due Date: 02/14/18

CLIENT: GAPower-CCR

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 7896 3041 5393

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used THR-083 Type of Ice: (Wet) Blue None ☐ Samples on Ice, cooling process has begun

Cooler Temperature 1.3 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 2/7/18 MR

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: GW				
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No		Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☐No	☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if purchased):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp incorrect containers)

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

March 05, 2018

Lauren Petty
Southern Company Services, Inc.
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: Plant Kraft AP
Pace Project No.: 261599

Dear Lauren Petty:
Enclosed are the analytical results for sample(s) received by the laboratory on February 08, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kevin Stephenson, Resolute Environmental & Water Resources Consulting, LLC
Stephen Wilson, Resolute Environmental & Water Resources Consulting, LLC

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CERTIFICATIONS

Project: Plant Kraft AP
Pace Project No.: 261599

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Texas Certification #: T104704397-08-TX
Virginia Certification #: 460204

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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SAMPLE SUMMARY

Project: Plant Kraft AP
Pace Project No.: 261599

Lab ID	Sample ID	Matrix	Date Collected	Date Received
261599001	**KMW-02**	Water	02/07/18 14:20	02/08/18 10:35
261599002	**KMW-02**	Water	02/07/18 14:20	02/08/18 10:35
261599003	**KMW-01**	Water	02/07/18 10:00	02/08/18 10:35
261599004	**KMW-01**	Water	02/07/18 10:00	02/08/18 10:35
261599005	**EQBL020718**	Water	02/07/18 10:30	02/08/18 10:35
261599006	**EQBL020718**	Water	02/07/18 10:30	02/08/18 10:35
261599007	**FBL020718**	Water	02/07/18 10:45	02/08/18 10:35
261599008	**FBL020718**	Water	02/07/18 10:45	02/08/18 10:35
261599009	**Dup-1**	Water	02/07/18 00:00	02/08/18 10:35
261599010	**Dup-1**	Water	02/07/18 00:00	02/08/18 10:35

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SAMPLE ANALYTE COUNT

Project: Plant Kraft AP
Pace Project No.: 261599

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
261599001	**KMW-02**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261599002	**KMW-02**	EPA 6020B	KLH	1	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261599003	**KMW-01**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261599004	**KMW-01**	EPA 6020B	KLH	1	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261599005	**EQBL020718**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261599006	**EQBL020718**	EPA 6020B	KLH	1	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261599007	**FBL020718**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261599008	**FBL020718**	EPA 6020B	KLH	1	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA
261599009	**Dup-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
261599010	**Dup-1**	EPA 6020B	KLH	1	PASI-GA
		SM 2320B	JAD	2	PASI-GA
		SM 2540C	EJJ	1	PASI-A
		EPA 300.0	RLC	2	PASI-GA

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: KMW-02 **Lab ID: 261599002** Collected: 02/07/18 14:20 Received: 02/08/18 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	**27.5**	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 15:06	7440-38-2	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**22.0**	mg/L	20.0	20.0	1		02/09/18 12:24		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		02/09/18 12:24		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**366**	mg/L	50.0	50.0	1		02/09/18 19:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**139**	mg/L	2.5	0.24	10		02/22/18 15:51	16887-00-6	M1
Sulfate	**78.7**	mg/L	10.0	0.17	10		02/22/18 15:51	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: KMW-01 **Lab ID: 261599004** Collected: 02/07/18 10:00 Received: 02/08/18 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	**3.2J**	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 15:17	7440-38-2	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:12		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:12		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**3420**	mg/L	250	250	1		02/09/18 19:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**1720**	mg/L	25.0	2.4	100		02/22/18 16:11	16887-00-6	M1
Sulfate	**319J**	mg/L	100	1.7	100		02/22/18 16:11	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: EQBL020718 **Lab ID: 261599006** Collected: 02/07/18 10:30 Received: 02/08/18 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 15:29	7440-38-2	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**1.0**	mg/L	1.0	1.0	1		02/14/18 12:14		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:14		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/09/18 19:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	ND	mg/L	0.25	0.024	1		02/12/18 16:31	16887-00-6	
Sulfate	ND	mg/L	1.0	0.017	1		02/12/18 16:31	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: FBL020718 **Lab ID: 261599008** Collected: 02/07/18 10:45 Received: 02/08/18 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 15:35	7440-38-2	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:18		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:18		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/09/18 19:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	ND	mg/L	0.25	0.024	1		02/12/18 16:51	16887-00-6	
Sulfate	ND	mg/L	1.0	0.017	1		02/12/18 16:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: Dup-1 **Lab ID: 261599010** Collected: 02/07/18 00:00 Received: 02/08/18 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	**3.1J**	ug/L	5.0	0.52	1	02/15/18 08:13	02/15/18 15:40	7440-38-2	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:22		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		02/14/18 12:22		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**3080**	mg/L	62.5	62.5	1		02/09/18 19:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**1720**	mg/L	25.0	2.4	100		02/22/18 16:32	16887-00-6	
Sulfate	**318J**	mg/L	100	1.7	100		02/22/18 16:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Kraft AP
Pace Project No.: 261599

QC Batch: 911 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 261599002, 261599004, 261599006, 261599008, 261599010

METHOD BLANK: 6438 Matrix: Water
Associated Lab Samples: 261599002, 261599004, 261599006, 261599008, 261599010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	ND	5.0	0.52	02/15/18 13:46	

LABORATORY CONTROL SAMPLE: 6439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	100	99.6	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6550 6551

Parameter	Units	261658002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	100	100	98.5	100	98	100	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant Kraft AP
Pace Project No.: 261599

QC Batch: 397509 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 261599002, 261599004, 261599006, 261599008, 261599010

METHOD BLANK: 2204742 Matrix: Water
Associated Lab Samples: 261599002, 261599004, 261599006, 261599008, 261599010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/09/18 19:38	

LABORATORY CONTROL SAMPLE: 2204743

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	238	95	90-110	

SAMPLE DUPLICATE: 2204744

Parameter	Units	92372509001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	100	94.0	6	5	D6

SAMPLE DUPLICATE: 2204745

Parameter	Units	92372532005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	170000 ug/L	167	2	5	

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QUALITY CONTROL DATA

Project: Plant Kraft AP
Pace Project No.: 261599

QC Batch: 859 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 261599002, 261599004, 261599006, 261599008, 261599010

METHOD BLANK: 6241 Matrix: Water
Associated Lab Samples: 261599002, 261599004, 261599006, 261599008, 261599010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	02/12/18 13:45	
Sulfate	mg/L	ND	1.0	0.017	02/12/18 13:45	

LABORATORY CONTROL SAMPLE: 6242

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.9	99	90-110	
Sulfate	mg/L	10	9.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6243 6244

Parameter	Units	261599002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	139	10	10	90.7	90.7	-484	-483	90-110	0	15	E,M1
Sulfate	mg/L	78.7	10	10	76.2	76.3	-25	-24	90-110	0	15	E,M1

MATRIX SPIKE SAMPLE: 6245

Parameter	Units	261599004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1720	10	318	-14000	90-110	E,M1
Sulfate	mg/L	319J	10	205	-1140	90-110	E,M1

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: KMW-02 **Lab ID: 261599001** Collected: 02/07/18 14:20 Received: 02/08/18 10:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.51 ± 0.508 (0.401) C:75% T:NA**	pCi/L	02/16/18 08:16	13982-63-3	
Radium-228	EPA 9320	**1.21 ± 0.536 (0.918) C:77% T:84%**	pCi/L	02/23/18 16:31	15262-20-1	
Total Radium	Total Radium Calculation	**2.72 ± 1.04 (1.32)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: KMW-01 **Lab ID: 261599003** Collected: 02/07/18 10:00 Received: 02/08/18 10:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.27 ± 0.474 (0.172) C:86% T:NA**	pCi/L	02/22/18 08:39	13982-63-3	
Radium-228	EPA 9320	**8.02 ± 1.64 (0.754) C:79% T:82%**	pCi/L	02/23/18 16:29	15262-20-1	
Total Radium	Total Radium Calculation	**10.3 ± 2.11 (0.926)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: EQBL020718 **Lab ID: 261599005** Collected: 02/07/18 10:30 Received: 02/08/18 10:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.304 ± 0.242 (0.408) C:86% T:NA**	pCi/L	02/16/18 08:33	13982-63-3	
Radium-228	EPA 9320	**0.250 ± 0.328 (0.696) C:70% T:77%**	pCi/L	02/23/18 15:01	15262-20-1	
Total Radium	Total Radium Calculation	**0.554 ± 0.570 (1.10)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: FBL020718 **Lab ID: 261599007** Collected: 02/07/18 10:45 Received: 02/08/18 10:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.204 ± 0.259 (0.548) C:71% T:NA**	pCi/L	02/16/18 08:35	13982-63-3	
Radium-228	EPA 9320	**0.243 ± 0.306 (0.645) C:72% T:83%**	pCi/L	02/23/18 15:01	15262-20-1	
Total Radium	Total Radium Calculation	**0.447 ± 0.565 (1.19)**	pCi/L	03/02/18 13:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261599

Sample: Dup-1 **Lab ID: 261599009** Collected: 02/07/18 00:00 Received: 02/08/18 10:35 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.00 ± 0.431 (0.145) C:88% T:NA**	pCi/L	02/22/18 08:40	13982-63-3	
Radium-228	EPA 9320	**10.4 ± 2.11 (0.866) C:71% T:72%**	pCi/L	02/23/18 15:01	15262-20-1	
Total Radium	Total Radium Calculation	**12.4 ± 2.54 (1.01)**	pCi/L	03/02/18 13:27	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261599

QC Batch: 288045 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 261599001, 261599003, 261599005, 261599007, 261599009

METHOD BLANK: 1411778 Matrix: Water
Associated Lab Samples: 261599001, 261599003, 261599005, 261599007, 261599009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.233 ± 0.202 (0.346) C:86% T:NA	pCi/L	02/16/18 08:16	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft AP
Pace Project No.: 261599

QC Batch: 288055 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 261599001, 261599003, 261599005, 261599007, 261599009

METHOD BLANK: 1411785 Matrix: Water
Associated Lab Samples: 261599001, 261599003, 261599005, 261599007, 261599009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.738 ± 0.410 (0.739) C:78% T:78%	pCi/L	02/23/18 13:19	

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QUALIFIERS

Project: Plant Kraft AP
Pace Project No.: 261599

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-GA	Pace Analytical Services - Atlanta, GA
PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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Peachtree Corners, GA 30092
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft AP
Pace Project No.: 261599

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
261599002	**KMW-02**	EPA 3005A	911	EPA 6020B	1093
261599004	**KMW-01**	EPA 3005A	911	EPA 6020B	1093
261599006	**EQBL020718**	EPA 3005A	911	EPA 6020B	1093
261599008	**FBL020718**	EPA 3005A	911	EPA 6020B	1093
261599010	**Dup-1**	EPA 3005A	911	EPA 6020B	1093
261599001	**KMW-02**	EPA 9315	288045		
261599003	**KMW-01**	EPA 9315	288045		
261599005	**EQBL020718**	EPA 9315	288045		
261599007	**FBL020718**	EPA 9315	288045		
261599009	**Dup-1**	EPA 9315	288045		
261599001	**KMW-02**	EPA 9320	288055		
261599003	**KMW-01**	EPA 9320	288055		
261599005	**EQBL020718**	EPA 9320	288055		
261599007	**FBL020718**	EPA 9320	288055		
261599009	**Dup-1**	EPA 9320	288055		
261599001	**KMW-02**	Total Radium Calculation	289957		
261599003	**KMW-01**	Total Radium Calculation	289957		
261599005	**EQBL020718**	Total Radium Calculation	289957		
261599007	**FBL020718**	Total Radium Calculation	289957		
261599009	**Dup-1**	Total Radium Calculation	289957		
261599002	**KMW-02**	SM 2320B	773		
261599004	**KMW-01**	SM 2320B	1019		
261599006	**EQBL020718**	SM 2320B	1019		
261599008	**FBL020718**	SM 2320B	1019		
261599010	**Dup-1**	SM 2320B	1019		
261599002	**KMW-02**	SM 2540C	397509		
261599004	**KMW-01**	SM 2540C	397509		
261599006	**EQBL020718**	SM 2540C	397509		
261599008	**FBL020718**	SM 2540C	397509		
261599010	**Dup-1**	SM 2540C	397509		
261599002	**KMW-02**	EPA 300.0	859		
261599004	**KMW-01**	EPA 300.0	859		
261599006	**EQBL020718**	EPA 300.0	859		
261599008	**FBL020718**	EPA 300.0	859		
261599010	**Dup-1**	EPA 300.0	859		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Joju Abraham	Attention:	
Address:	2480 Maner Road	Copy To:	[illegible]	Company Name:	GPC Environmental Affairs
Atlanta, GA 30339				Address:	
Email:	jabraham@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(404)506-7239 Fax	Project Name:	Plant Kraft AP	Pace Project Manager:	betsy.mcdaniel@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	329

Regulatory Agency: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Radium 226/228	Metals 6020 (As,Ca,Mg,K,Na)	Metals 6020 (As only)	Carb Alk, Bicarb Alk, TDS, C	PAH 8270/SIM	Residual Chlorine (Y/N)
1	KMW-02	WT	C	2/7/18	1420				5	X		X							X	X	X	X		1/2
2	KMW-01	WT	G	2/7/18	1000				5	X		X							X	X	X	X		3/4
3	FBBL020718	WT	G	2/7/18	1030				5	X		X							X	X	X	X		5/6
4	FBL020718	WT	G	2/7/18	1045				5	X		X							X	X	X	X		7/8
5	DUP-1	WT	G	2/7/18	/				5	X		X							X	X	X	X		9/10
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

WO# : 261599

261599

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
				MRahman	2/8/18	1035

SAMPLE CONDITIONS

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
0.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Michael Padgham

SIGNATURE of SAMPLER: [signature]

DATE Signed: 2/7/18

FedEx

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

Project #

WO# : 261599

PM: BM Due Date: 02/15/18

CLIENT: GAPower

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 7896 4633 2278

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used THR83 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.5 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 2/8/18 MR

			Comments:	
Chain of Custody Present:	☑Yes	☐No ☐N/A	1.	
Chain of Custody Filled Out:	☑Yes	☐No ☐N/A	2.	
Chain of Custody Relinquished:	☑Yes	☐No ☐N/A	3.	
Sampler Name & Signature on COC:	☑Yes	☐No ☐N/A	4.	
Samples Arrived within Hold Time:	☑Yes	☐No ☐N/A	5.	
Short Hold Time Analysis (<72hr):	☐Yes	☑No ☐N/A	6.	
Rush Turn Around Time Requested:	☐Yes	☑No ☐N/A	7.	
Sufficient Volume:	☑Yes	☐No ☐N/A	8.	
Correct Containers Used:	☑Yes	☐No ☐N/A	9.	
-Pace Containers Used:	☑Yes	☐No ☐N/A		
Containers Intact:	☑Yes	☐No ☐N/A	10.	
Filtered volume received for Dissolved tests	☐Yes	☐No ☑N/A	11.	
Sample Labels match COC:	☑Yes	☐No ☐N/A	12.	
-Includes date/time/ID/Analysis Matrix: GW				
All containers needing preservation have been checked.	☑Yes	☐No ☐N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No ☐N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No ☑N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes	☐No ☑N/A	15.	
Trip Blank Present:	☐Yes	☐No ☑N/A	16.	
Trip Blank Custody Seals Present	☐Yes	☐No ☑N/A		
Pace Trip Blank Lot # (if purchased):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp incorrect containers)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

June 06, 2018

Lauren Petty
Southern Company Services, Inc.
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: Plant Kraft
Pace Project No.: 264776

Dear Lauren Petty:
Enclosed are the analytical results for sample(s) received by the laboratory on May 08, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kevin Stephenson, Resolute Environmental & Water Resources Consulting, LLC
Stephen Wilson, Resolute Environmental & Water Resources Consulting, LLC

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Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Kraft
Pace Project No.: 264776

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Plant Kraft
Pace Project No.: 264776

Lab ID	Sample ID	Matrix	Date Collected	Date Received
264776001	**KMW-1**	Water	05/07/18 14:40	05/08/18 12:33
264776002	**KMW-12**	Water	05/07/18 14:52	05/08/18 12:33

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SAMPLE ANALYTE COUNT

Project: Plant Kraft
Pace Project No.: 264776

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
264776001	**KMW-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
264776002	**KMW-12**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 264776

Sample: KMW-1 **Lab ID: 264776001** Collected: 05/07/18 14:40 Received: 05/08/18 12:33 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.41 ± 0.648 (0.528) C:93% T:NA**	pCi/L	05/29/18 08:31	13982-63-3	
Radium-228	EPA 9320	**9.85 ± 2.03 (1.09) C:83% T:78%**	pCi/L	05/28/18 21:28	15262-20-1	
Total Radium	Total Radium Calculation	**12.3 ± 2.68 (1.62)**	pCi/L	06/05/18 14:09	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 264776

Sample: KMW-12 **Lab ID: 264776002** Collected: 05/07/18 14:52 Received: 05/08/18 12:33 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.81 ± 0.736 (0.572) C:83% T:NA**	pCi/L	05/29/18 08:40	13982-63-3	
Radium-228	EPA 9320	**1.43 ± 0.606 (0.983) C:77% T:87%**	pCi/L	05/28/18 21:28	15262-20-1	
Total Radium	Total Radium Calculation	**4.24 ± 1.34 (1.56)**	pCi/L	06/05/18 14:09	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 264776

QC Batch: 299606 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 264776001, 264776002

METHOD BLANK: 1466605 Matrix: Water
Associated Lab Samples: 264776001, 264776002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.175 ± 0.204 (0.419) C:94% T:NA	pCi/L	05/29/18 08:14	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft
Pace Project No.: 264776

QC Batch: 299164 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 264776001, 264776002

METHOD BLANK: 1464803 Matrix: Water
Associated Lab Samples: 264776001, 264776002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.569 ± 0.499 (0.997) C:84% T:81%	pCi/L	05/28/18 21:26	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: Plant Kraft
Pace Project No.: 264776

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft
Pace Project No.: 264776

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
264776001	**KMW-1**	EPA 9315	299606		
264776002	**KMW-12**	EPA 9315	299606		
264776001	**KMW-1**	EPA 9320	299164		
264776002	**KMW-12**	EPA 9320	299164		
264776001	**KMW-1**	Total Radium Calculation	301033		
264776002	**KMW-12**	Total Radium Calculation	301033		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - ~~Coal Combustion Residuals~~	Report To:	Joju Abraham	Attention:	
Address:	2480 Maner Road	Copy To:		Company Name:	
	Atlanta, GA 30339			Address:	
Email:	jabraham@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(404)506-7239 Fax	Project Name:	~~Plant McManus CCR~~ Plant Kraft	Pace Project Manager:	betsy.mcdaniel@pacelabs.com
Requested Due Date:		Project #:		Pace Profile #:	334

Regulatory Agency	
State / Location	
GA	

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test	TDS by 2540C	Metals by 6020/7470	Anions (Cl,F,So4)	Radium 226/228	Residual Chlorine (Y/N)	
1	KMW-1	WT	G			5/7/18	1440		2			X											X		1
2	KMW-12	WT	G			5/7/18	1457		8			X											X		2
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Robert Mull / Resolute	5/7/18	1655	Audrey Crafton	5/7/18	1655
	Audrey Crafton	5/8/18	1233	Christian Hinkle	5/8/18	1233

SAMPLE CONDITIONS			
TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
0.3	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Robert Mull / Veronica Fay

SIGNATURE of SAMPLER: Robert E Mull DATE Signed: 5/7/18

NO#: 264776

264776

Sample Condition Upon Receipt

Pace Analytical

Client Name: Georgia Power

WO# : 264776

PM: BM Due Date: 06/06/18

CLIENT: GAPower

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used THR082 **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.3°C **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 5/8/18 CDH

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W				
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No		Initial when completed: _____ Lot # of added preservative: _____
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☐No	☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if purchased): _____				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, LLC
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

February 08, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on February 01, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melissa Sybert
melissa.sybert@pacelabs.com
Project Manager

Enclosures

cc: Betsy McDaniel, Pace Analytical Atlanta

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CERTIFICATIONS

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92328259001	**MW-15**	Water	01/31/17 15:52	02/01/17 09:25
92328259002	**MW-15D**	Water	01/31/17 14:21	02/01/17 09:25
92328259003	**DUP-2**	Water	01/31/17 00:00	02/01/17 09:25
92328259004	**EQBL-2**	Water	01/31/17 18:20	02/01/17 09:25

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SAMPLE ANALYTE COUNT

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92328259001	**MW-15**	EPA 8270 by SIM	BPJ	7	PASI-C
92328259002	**MW-15D**	EPA 8270 by SIM	BPJ	7	PASI-C
92328259003	**DUP-2**	EPA 8270 by SIM	BPJ	7	PASI-C
92328259004	**EQBL-2**	EPA 8270 by SIM	BPJ	7	PASI-C

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SUMMARY OF DETECTION

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92328259001	**MW-15**					
EPA 8270 by SIM	Benzo(a)anthracene	0.44	ug/L	0.10	02/07/17 10:27	R1
92328259002	**MW-15D**					
EPA 8270 by SIM	Benzo(a)anthracene	1.2	ug/L	0.10	02/07/17 11:28	
EPA 8270 by SIM	Benzo(a)pyrene	0.24	ug/L	0.20	02/07/17 11:28	
EPA 8270 by SIM	Benzo(b)fluoranthene	0.43	ug/L	0.20	02/07/17 11:28	
92328259003	**DUP-2**					
EPA 8270 by SIM	Benzo(a)anthracene	0.45	ug/L	0.10	02/07/17 11:48	

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ANALYTICAL RESULTS

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Sample: MW-15 **Lab ID: 92328259001** Collected: 01/31/17 15:52 Received: 02/01/17 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	**0.44**	ug/L	0.10	0.10	1	02/02/17 09:57	02/07/17 10:27	56-55-3	R1
Benzo(a)pyrene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 10:27	50-32-8	R1
Benzo(b)fluoranthene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 10:27	205-99-2	R1
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 10:27	193-39-5	
Surrogates									
Nitrobenzene-d5 (S)	90	%	30-150		1	02/02/17 09:57	02/07/17 10:27	4165-60-0	
2-Fluorobiphenyl (S)	72	%	30-150		1	02/02/17 09:57	02/07/17 10:27	321-60-8	
Terphenyl-d14 (S)	50	%	30-150		1	02/02/17 09:57	02/07/17 10:27	1718-51-0	

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ANALYTICAL RESULTS

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Sample: MW-15D **Lab ID: 92328259002** Collected: 01/31/17 14:21 Received: 02/01/17 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	**1.2**	ug/L	0.10	0.10	1	02/02/17 09:57	02/07/17 11:28	56-55-3	
Benzo(a)pyrene	**0.24**	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 11:28	50-32-8	
Benzo(b)fluoranthene	**0.43**	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 11:28	205-99-2	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 11:28	193-39-5	
Surrogates									
Nitrobenzene-d5 (S)	92	%	30-150		1	02/02/17 09:57	02/07/17 11:28	4165-60-0	
2-Fluorobiphenyl (S)	65	%	30-150		1	02/02/17 09:57	02/07/17 11:28	321-60-8	
Terphenyl-d14 (S)	41	%	30-150		1	02/02/17 09:57	02/07/17 11:28	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Sample: DUP-2 **Lab ID: 92328259003** Collected: 01/31/17 00:00 Received: 02/01/17 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	**0.45**	ug/L	0.10	0.10	1	02/02/17 09:57	02/07/17 11:48	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 11:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 11:48	205-99-2	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 11:48	193-39-5	
Surrogates									
Nitrobenzene-d5 (S)	92	%	30-150		1	02/02/17 09:57	02/07/17 11:48	4165-60-0	
2-Fluorobiphenyl (S)	68	%	30-150		1	02/02/17 09:57	02/07/17 11:48	321-60-8	
Terphenyl-d14 (S)	44	%	30-150		1	02/02/17 09:57	02/07/17 11:48	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Sample: EQBL-2 **Lab ID: 92328259004** Collected: 01/31/17 18:20 Received: 02/01/17 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	ND	ug/L	0.10	0.10	1	02/02/17 09:57	02/07/17 12:09	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 12:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 12:09	205-99-2	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.20	0.20	1	02/02/17 09:57	02/07/17 12:09	193-39-5	
Surrogates									
Nitrobenzene-d5 (S)	104	%	30-150		1	02/02/17 09:57	02/07/17 12:09	4165-60-0	
2-Fluorobiphenyl (S)	79	%	30-150		1	02/02/17 09:57	02/07/17 12:09	321-60-8	
Terphenyl-d14 (S)	99	%	30-150		1	02/02/17 09:57	02/07/17 12:09	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

QUALITY CONTROL DATA

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

QC Batch: 346692 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water CPAH by SIM MSSV 3510
Associated Lab Samples: 92328259001, 92328259002, 92328259003, 92328259004

METHOD BLANK: 1923128 Matrix: Water
Associated Lab Samples: 92328259001, 92328259002, 92328259003, 92328259004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(a)anthracene	ug/L	ND	0.10	0.10	02/07/17 09:46	
Benzo(a)pyrene	ug/L	ND	0.20	0.20	02/07/17 09:46	
Benzo(b)fluoranthene	ug/L	ND	0.20	0.20	02/07/17 09:46	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.20	0.20	02/07/17 09:46	
2-Fluorobiphenyl (S)	%	81	30-150		02/07/17 09:46	
Nitrobenzene-d5 (S)	%	109	30-150		02/07/17 09:46	
Terphenyl-d14 (S)	%	104	30-150		02/07/17 09:46	

LABORATORY CONTROL SAMPLE: 1923129

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(a)anthracene	ug/L	1	0.84	84	51-134	
Benzo(a)pyrene	ug/L	1	0.80	80	58-133	
Benzo(b)fluoranthene	ug/L	1	0.85	85	42-143	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.89	89	46-121	
2-Fluorobiphenyl (S)	%			89	30-150	
Nitrobenzene-d5 (S)	%			119	30-150	
Terphenyl-d14 (S)	%			111	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1923130 1923131

Parameter	Units	92328259001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzo(a)anthracene	ug/L	0.44	2	2	1.9	0.89	75	23	18-104	74	30	R1
Benzo(a)pyrene	ug/L	ND	2	2	1.3	0.53	62	23	14-121	85	30	R1
Benzo(b)fluoranthene	ug/L	ND	2	2	1.3	0.56	61	23	11-116	82	30	R1
Indeno(1,2,3-cd)pyrene	ug/L	ND	2	2	0.73	ND	36	14	10-120		30	
2-Fluorobiphenyl (S)	%						87	39	30-150			
Nitrobenzene-d5 (S)	%						3	2	30-150			S0
Terphenyl-d14 (S)	%						48	20	30-150			S0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AAB0024 GA Power - Plant Kraft
Pace Project No.: 92328259

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92328259001	**MW-15**	EPA 3510	346692	EPA 8270 by SIM	347050
92328259002	**MW-15D**	EPA 3510	346692	EPA 8270 by SIM	347050
92328259003	**DUP-2**	EPA 3510	346692	EPA 8270 by SIM	347050
92328259004	**EQBL-2**	EPA 3510	346692	EPA 8270 by SIM	347050

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Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

WO# : 92328259

92328259

Client Name: GA Paver Company **Project #:**

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:____

Custody Seal Present? ☐ Yes ☐ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 02/01/17 JFC

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other:____

Thermometer: ☐ IR Gun ID: T1603 **Type of Ice:** ☐ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Correction Factor: **Cooler Temp Corrected (°C):** 3.3 **Biological Tissue Frozen?** ☐ Yes ☐ No ☐ N/A

Temp should be above freezing to 6°C

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☐ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☐ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☐ No	☐ N/A	4.
Sufficient Volume?	☐ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☐ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☐ Yes	☐ No	☐ N/A	7.
Samples Field Filtered?	☐ Yes	☐ No	☐ N/A	8. Note if sediment is visible in the dissolved container
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	☐ Yes	☐ No	☐ N/A	9.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☐ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☐ N/A	

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Sample Discrepancy: _____

Project Manager SCURF Review: MS **Date:** 2/1/17

Project Manager SRF Review: MS **Date:** 2/1/17

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers)

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

****Bottom half of box is to list number of bottles**

Project # **WO# : 92328259**

PM: MSS Due Date: 02/08/17

CLIENT: 93-PaceATL

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP3S-250 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1										2																		
2										2																		
3										2																		
4										2																		
5										2																		
6																												
7																												
8																												
9																												
10																												
11																												
~~12~~										2																		

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

5336

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1

CLIENT NAME: GEORGIA POWER COMPANY

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 RALPH MCGILL BLVD SE B10185
ATLANTA GA 30308
404.506.7239

REPORT TO: MARIA PADILLA, LAUREN PETTY
CC: STEPHEN.WILSON@RESOLVTECH.COM, MICHAEL.PATINKIN@RESOLVTECH.COM

REQUESTED COMPLETION DATE: STANDARD TAT
PO #: EC5911

PROJECT NAME/STATE: PLANT KRAFT

PROJECT #: PLANT KRAFT - NORTHERN AREA

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	BENZO(A) ANTHRACENE (EPA 8270-SIM)	BENZO(A) PYRENE (EPA 8270-SIM)	BENZO(B) FLUORANTHENE (EPA 8270-SIM)	INDENO(1,2,3-CD) PYRENE (EPA 8270-SIM)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
						CONTAINER TYPE:	A	A	A	A		
						PRESERVATION:	7	7	7	7		
01/31/17	1552	GW		X	MW-15	2	X	X	X	X		2 COOLERS 92320759-001
01/31/17	1421	GW		X	MW-15D	2	X	X	X	X		002
01/31/17	—	GW		X	DUP-2	2	X	X	X	X		003
01/31/17	1700	GW		X	MS-013117	2	X	X	X	X		001
01/31/17	1700	GW		X	MSD-013117	2	X	X	X	X		001
01/31/17	1820	W		X	EQBL-2	2	X	X	X	X		004

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤6°C
7 - ≤6°C not frozen

*MATRIX CODES:

DW - DRINKING WATER
WW - WASTEWATER
GW - GROUNDWATER
SW - SURFACE WATER
ST - STORM WATER
W - WATER
S - SOIL
SL - SLUDGE
SD - SOLID
A - AIR
L - LIQUID
P - PRODUCT

SAMPLED BY AND TITLE: FORREST HOWARD & MICHAEL PATINKIN
DATE/TIME: 01/31/17 1800
RELINQUISHED BY:
DATE/TIME: 01/31/17 1800

RECEIVED BY: DW Trip BVL
DATE/TIME: 02/01/17 09:25
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME:
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 3.3 Min: Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

(MP) 01/31/17

Pace Analytical Services, LLC
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

August 11, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on August 05, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Godwin
kevin.godwin@pacelabs.com
1(704)875-9092
Project Manager

Enclosures

cc: Betsy McDaniel, Pace Analytical Atlanta

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CERTIFICATIONS

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92350388001	**MW-15D(R) MS/MSD**	Water	08/04/17 13:00	08/05/17 09:10
92350388002	**Dup-01**	Water	08/04/17 00:00	08/05/17 09:10
92350388003	**EQBL-080417**	Water	08/04/17 14:05	08/05/17 09:10

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SAMPLE ANALYTE COUNT

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92350388001	**MW-15D(R) MS/MSD**	EPA 8270 by SIM	RES	7	PASI-C
92350388002	**Dup-01**	EPA 8270 by SIM	RES	7	PASI-C
92350388003	**EQBL-080417**	EPA 8270 by SIM	RES	7	PASI-C

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SUMMARY OF DETECTION

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92350388001	**MW-15D(R) MS/MSD**					
EPA 8270 by SIM	Benzo(a)anthracene	0.00023	mg/L	0.00010	08/10/17 11:31	
92350388002	**Dup-01**					
EPA 8270 by SIM	Benzo(a)anthracene	0.00022	mg/L	0.00010	08/10/17 12:40	

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ANALYTICAL RESULTS

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

Sample: MW-15D(R) MS/MSD **Lab ID: 92350388001** Collected: 08/04/17 13:00 Received: 08/05/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	**0.00023**	mg/L	0.00010	0.00010	1	08/08/17 15:00	08/10/17 11:31	56-55-3	
Benzo(a)pyrene	ND	mg/L	0.00020	0.00020	1	08/08/17 15:00	08/10/17 11:31	50-32-8	R1
Benzo(b)fluoranthene	ND	mg/L	0.00020	0.00020	1	08/08/17 15:00	08/10/17 11:31	205-99-2	R1
Indeno(1,2,3-cd)pyrene	ND	mg/L	0.00020	0.00020	1	08/08/17 15:00	08/10/17 11:31	193-39-5	M1
Surrogates									
Nitrobenzene-d5 (S)	98	%	30-150		1	08/08/17 15:00	08/10/17 11:31	4165-60-0	
2-Fluorobiphenyl (S)	88	%	30-150		1	08/08/17 15:00	08/10/17 11:31	321-60-8	
Terphenyl-d14 (S)	39	%	30-150		1	08/08/17 15:00	08/10/17 11:31	1718-51-0	

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ANALYTICAL RESULTS

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

Sample: Dup-01 **Lab ID: 92350388002** Collected: 08/04/17 00:00 Received: 08/05/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	**0.00022**	mg/L	0.00010	0.00010	1	08/08/17 15:00	08/10/17 12:40	56-55-3	
Benzo(a)pyrene	ND	mg/L	0.00020	0.00020	1	08/08/17 15:00	08/10/17 12:40	50-32-8	
Benzo(b)fluoranthene	ND	mg/L	0.00020	0.00020	1	08/08/17 15:00	08/10/17 12:40	205-99-2	
Indeno(1,2,3-cd)pyrene	ND	mg/L	0.00020	0.00020	1	08/08/17 15:00	08/10/17 12:40	193-39-5	
Surrogates									
Nitrobenzene-d5 (S)	90	%	30-150		1	08/08/17 15:00	08/10/17 12:40	4165-60-0	
2-Fluorobiphenyl (S)	76	%	30-150		1	08/08/17 15:00	08/10/17 12:40	321-60-8	
Terphenyl-d14 (S)	35	%	30-150		1	08/08/17 15:00	08/10/17 12:40	1718-51-0	

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ANALYTICAL RESULTS

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

Sample: EQBL-080417 **Lab ID: 92350388003** Collected: 08/04/17 14:05 Received: 08/05/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	ND	ug/L	0.10	0.10	1	08/08/17 15:00	08/10/17 13:03	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.20	0.20	1	08/08/17 15:00	08/10/17 13:03	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.20	0.20	1	08/08/17 15:00	08/10/17 13:03	205-99-2	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.20	0.20	1	08/08/17 15:00	08/10/17 13:03	193-39-5	
Surrogates									
Nitrobenzene-d5 (S)	113	%	30-150		1	08/08/17 15:00	08/10/17 13:03	4165-60-0	
2-Fluorobiphenyl (S)	116	%	30-150		1	08/08/17 15:00	08/10/17 13:03	321-60-8	
Terphenyl-d14 (S)	116	%	30-150		1	08/08/17 15:00	08/10/17 13:03	1718-51-0	

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QUALITY CONTROL DATA

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

QC Batch: 372385 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water CPAH by SIM MSSV 3510
Associated Lab Samples: 92350388001, 92350388002, 92350388003

METHOD BLANK: 2063012 Matrix: Water
Associated Lab Samples: 92350388001, 92350388002, 92350388003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(a)anthracene	mg/L	ND	0.00010	0.00010	08/10/17 09:36	
Benzo(a)pyrene	mg/L	ND	0.00020	0.00020	08/10/17 09:36	
Benzo(b)fluoranthene	mg/L	ND	0.00020	0.00020	08/10/17 09:36	
Indeno(1,2,3-cd)pyrene	mg/L	ND	0.00020	0.00020	08/10/17 09:36	
2-Fluorobiphenyl (S)	%	110	30-150		08/10/17 09:36	
Nitrobenzene-d5 (S)	%	107	30-150		08/10/17 09:36	
Terphenyl-d14 (S)	%	113	30-150		08/10/17 09:36	

LABORATORY CONTROL SAMPLE: 2063013

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(a)anthracene	mg/L	.001	0.00093	93	51-134	
Benzo(a)pyrene	mg/L	.001	0.00084	84	58-133	
Benzo(b)fluoranthene	mg/L	.001	0.00094	94	42-143	
Indeno(1,2,3-cd)pyrene	mg/L	.001	0.00076	76	46-121	
2-Fluorobiphenyl (S)	%			115	30-150	
Nitrobenzene-d5 (S)	%			115	30-150	
Terphenyl-d14 (S)	%			116	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2063014 2063015

Parameter	Units	92350388001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzo(a)anthracene	mg/L	0.00023	.002	.002	0.0016	0.0015	69	62	18-104	9	30	
Benzo(a)pyrene	mg/L	ND	.002	.002	0.00061	0.00045	30	22	14-121	31	30	R1
Benzo(b)fluoranthene	mg/L	ND	.002	.002	0.00073	0.00049	36	24	11-116	39	30	R1
Indeno(1,2,3-cd)pyrene	mg/L	ND	.002	.002	ND	ND	9	7	10-120		30	M1
2-Fluorobiphenyl (S)	%						96	105	30-150			
Nitrobenzene-d5 (S)	%						99	107	30-150			
Terphenyl-d14 (S)	%						44	36	30-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

QUALIFIERS

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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Asheville, NC 28804
(828)254-7176

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AAH0247 GEORGIA POWER-CCR
Pace Project No.: 92350388

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92350388001	**MW-15D(R) MS/MSD**	EPA 3510	372385	EPA 8270 by SIM	372728
92350388002	**Dup-01**	EPA 3510	372385	EPA 8270 by SIM	372728
92350388003	**EQBL-080417**	EPA 3510	372385	EPA 8270 by SIM	372728

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Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: July 25, 2017 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.03	Issuing Authority: Pace Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power **Project #:** WO#: 92350388

92350388

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other:____

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: CHW 8/7/17

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: T1701 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Correction Factor: 0.0C **Cooler Temp Corrected (°C):** 5.7

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☑ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☑ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Sample Discrepancy: _____

Project Manager SCURF Review: JJ **Date:** 8/8/17

Project Manager SRF Review: JJ **Date:** 8/8/17

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers)

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

**Bottom half of box is to list number of bottles

Project #

WO# : 92350388

PM: KRG Due Date: 08/14/17

CLIENT: 93-PaceATL

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1										6																			
2										2																			
3										2																			
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAH0247 Workorder Name: Plant Kraft Owner Received Date: 8/7/2017 Results Requested By: 8/16/2017

Report To:	Subcontract To:
Betsy McDaniel	ATTN: Bonnie Vang
Pace Analytical Atlanta	Pace- Asheville, NC
110 Technology Parkway	2225 Riverside Drive
Peachtree Corners, GA 30092	Asheville, NC
Phone (770)-734-4200	TELE:704-977-0938

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	BNA 8270 SIM	LAB USE ONLY
1	MW-15DR	G	8/4/2017 13:00	AAH0247-01	GW	6	X	001
2	Dup-01	G	8/4/2017 0:00	AAH0247-02	GW	2	X	002
3	EQBL080417	G	8/4/2017 14:05	AAH0247-03	W	2	X	003
4								
5								
6								
7								
8								
9								
10								

Transfers	Released By	Date/Time	Reveived By	Date/Time	Comments
1					Benzo(a)anthracene to 0.0001 ppm Benzo(a)pyrene, Benzo(b)fluoranthene, and Indeno(1,2,3-cd) to 0.0002 ppm
2					
3					

Cooler Temperature on Receipt _____ °C	Custody Seal Y or N	Received on Ice Y or N	Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC - Atlanta GA
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1

CLIENT NAME: GEORGIA POWER COMPANY

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 RALPH MCGILL BLVD SE B10185
ATLANTA, GA 30308

REPORT TO: MARIA PADILLA, LAUREN PETTY
CC: STEPHEN.WILSON@RESOLUTE-ENV.COM

REQUESTED COMPLETION DATE: STANDARD TAT
PO #: EC5911

PROJECT NAME/STATE: PLANT KRAFT NORTHERN AREA HSPA SITE

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	BENZO (A) ANTHRACENE EPA 8270-SIM	BENZO(A) PYRENE EPA 8270-SIM	BENZO(B) FLUORANTHENE EPA 8270-SIM	INDENO (1,2,3-CD) PYRENE EPA 8270-SIM	LAB ID NUMBER
	CONTAINER TYPE:						A	A	A	A	
	PRESERVATION:						7	7	7	7	
08/04/17	1300	GW		X	MW-15D(R) (MS/MSD)	6	X	X	X	X	
08/04/17	—	GW		X	Dup-01	2	X	X	X	X	
08/04/17	~~1300~~ 1405	W		X	EQBL-080417	2	X	X	X	X	

MA 08/04/17

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤6°C
7 - ≤6°C not frozen

*MATRIX CODES:

DW - DRINKING WATER
WW - WASTEWATER
GW - GROUNDWATER
SW - SURFACE WATER
ST - STORM WATER
W - WATER
S - SOIL
SL - SLUDGE
SD - SOLID
A - AIR
L - LIQUID
P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

1 COOLER 92350388-001
002
003

SAMPLED BY AND TITLE: ROBERT MULL
DATE/TIME: 08/04/17 1515

RELINQUISHED BY:
DATE/TIME: 1515 08/04/17

RECEIVED BY:
DATE/TIME: 8-5-17 9:10

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: Max:
Custody Seal: Intact Broken Not Present N/A
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 12, 2018

Lauren Petty
Southern Company Services, Inc.
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: Plant Kraft
Pace Project No.: 261705

Dear Lauren Petty:
Enclosed are the analytical results for sample(s) received by the laboratory on February 12, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kevin Stephenson, Resolute Environmental & Water Resources Consulting, LLC
Stephen Wilson, Resolute Environmental & Water Resources Consulting, LLC

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CERTIFICATIONS

Project: Plant Kraft
Pace Project No.: 261705

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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SAMPLE SUMMARY

Project: Plant Kraft
Pace Project No.: 261705

Lab ID	Sample ID	Matrix	Date Collected	Date Received
261705002	**MW-15DR**	Water	02/09/18 11:30	02/12/18 08:15
261705003	**EQBL020918**	Water	02/09/18 12:00	02/12/18 08:15

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Kraft
Pace Project No.: 261705

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
261705002	**MW-15DR**	EPA 8270 by SIM	PKS	7	PASI-C
261705003	**EQBL020918**	EPA 8270 by SIM	PKS	7	PASI-C

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant Kraft
Pace Project No.: 261705

Sample: MW-15DR **Lab ID: 261705002** Collected: 02/09/18 11:30 Received: 02/12/18 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	**0.00052**	mg/L	0.000050	0.000050	1	02/15/18 17:25	02/16/18 19:54	56-55-3	R1
Benzo(a)pyrene	ND	mg/L	0.00020	0.00020	1	02/15/18 17:25	02/16/18 19:54	50-32-8	R1
Benzo(b)fluoranthene	**0.00022**	mg/L	0.000050	0.000050	1	02/15/18 17:25	02/16/18 19:54	205-99-2	R1
Indeno(1,2,3-cd)pyrene	**0.000052**	mg/L	0.000050	0.000050	1	02/15/18 17:25	02/16/18 19:54	193-39-5	M1,R1
Surrogates									
Nitrobenzene-d5 (S)	22	%	30-150		1	02/15/18 17:25	02/16/18 19:54	4165-60-0	S2
2-Fluorobiphenyl (S)	51	%	30-150		1	02/15/18 17:25	02/16/18 19:54	321-60-8	
Terphenyl-d14 (S)	28	%	30-150		1	02/15/18 17:25	02/16/18 19:54	1718-51-0	S0

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant Kraft
Pace Project No.: 261705

Sample: EQBL020918 **Lab ID: 261705003** Collected: 02/09/18 12:00 Received: 02/12/18 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	ND	mg/L	0.000048	0.000048	1	02/15/18 17:25	02/16/18 21:03	56-55-3	
Benzo(a)pyrene	ND	mg/L	0.00019	0.00019	1	02/15/18 17:25	02/16/18 21:03	50-32-8	
Benzo(b)fluoranthene	ND	mg/L	0.000048	0.000048	1	02/15/18 17:25	02/16/18 21:03	205-99-2	
Indeno(1,2,3-cd)pyrene	ND	mg/L	0.000048	0.000048	1	02/15/18 17:25	02/16/18 21:03	193-39-5	
Surrogates									
Nitrobenzene-d5 (S)	77	%	30-150		1	02/15/18 17:25	02/16/18 21:03	4165-60-0	
2-Fluorobiphenyl (S)	77	%	30-150		1	02/15/18 17:25	02/16/18 21:03	321-60-8	
Terphenyl-d14 (S)	80	%	30-150		1	02/15/18 17:25	02/16/18 21:03	1718-51-0	

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Kraft
Pace Project No.: 261705

QC Batch: 398269
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 Water CPAH by SIM MSSV 3510
Associated Lab Samples: 261705002, 261705003

METHOD BLANK: 2209247 Matrix: Water
Associated Lab Samples: 261705002, 261705003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(a)anthracene	mg/L	ND	0.000050	0.000050	02/16/18 18:21	
Benzo(a)pyrene	mg/L	ND	0.00020	0.00020	02/16/18 18:21	
Benzo(b)fluoranthene	mg/L	ND	0.000050	0.000050	02/16/18 18:21	
Indeno(1,2,3-cd)pyrene	mg/L	ND	0.000050	0.000050	02/16/18 18:21	
2-Fluorobiphenyl (S)	%	75	30-150		02/16/18 18:21	
Nitrobenzene-d5 (S)	%	82	30-150		02/16/18 18:21	
Terphenyl-d14 (S)	%	96	30-150		02/16/18 18:21	

LABORATORY CONTROL SAMPLE: 2209248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(a)anthracene	mg/L	.001	0.00091	91	51-134	
Benzo(a)pyrene	mg/L	.001	0.00088	88	58-133	
Benzo(b)fluoranthene	mg/L	.001	0.00097	97	42-143	
Indeno(1,2,3-cd)pyrene	mg/L	.001	0.00092	92	46-121	
2-Fluorobiphenyl (S)	%			72	30-150	
Nitrobenzene-d5 (S)	%			79	30-150	
Terphenyl-d14 (S)	%			97	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2209249 2209250

Parameter	Units	261705002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzo(a)anthracene	mg/L	0.00052	.002	.002	0.0021	0.0013	78	39	18-104	47	30	R1
Benzo(a)pyrene	mg/L	ND	.002	.002	0.00085	0.00050	36	19	14-121	53	30	R1
Benzo(b)fluoranthene	mg/L	0.00022	.002	.002	0.0011	0.00059	43	18	11-116	59	30	R1
Indeno(1,2,3-cd)pyrene	mg/L	0.000052	.002	.002	0.00035	0.00022	15	8	10-120	49	30	M1,R1
2-Fluorobiphenyl (S)	%						68	74	30-150			
Nitrobenzene-d5 (S)	%						14	14	30-150			S2
Terphenyl-d14 (S)	%						37	34	30-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Kraft
Pace Project No.: 261705

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S2	Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

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Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft
Pace Project No.: 261705

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
261705002	**MW-15DR**	EPA 3510	398269	EPA 8270 by SIM	398448
261705003	**EQBL020918**	EPA 3510	398269	EPA 8270 by SIM	398448

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information: NORTHERN AREA	Section B Required Project Information:	Section C Invoice Information:
Company: Georgia Power ~~Coal Combustion Residuals~~	Report To: Joju Abraham, LAUREN PETTY, LEANNE STEPHEN WILSON, TRENT GODWIN	Attention:
Address: 2480 Maner Road	Copy To:	Company Name:
Atlanta, GA 30339	Purchase Order #:	Address:
Email: jabraham@southernco.com	Project Name: Plant Kraft ~~AP~~ NORTHERN AREA	Pace Quote:
Phone: (404)506-7239 Fax	Project #:	Pace Project Manager: betsy.mcdaniel@pacelabs.com,
Requested Due Date:		Pace Profile #: 329

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Radium 226/228	Metals 6020 (As,Ca,Mg,K,Na)	Metals 6020 (Ae only)	Carb Alk, Bicarb Alk, TDS, C	PAH 8270/SIM	Residual Chlorine (Y/N)
1	MW-15 DR (MS/MSD)	WT	G			02/09/18	1130		8	6		2							2				6	1/2
2	EQBL020918	DT	G			02/09/18	1200		2	2													2	3
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

* PAH SUBSET: IDENO PYRNE SERIES HISTORICALLY USED AT PLANT KRAFT NORTHERN AREA

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS → DEIONIZED WATER

WO#: 261705

261705

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	MICHAEL PATINKIN	02/12/18	0815	MDallman	2/12/18	0815				
							0.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MICHAEL PATINKIN

SIGNATURE of SAMPLER: [signature] DATE Signed: 02/12/18

Client.

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

Project #

WO# : 261705

PM: BM Due Date: 02/19/18

CLIENT: GAPower

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used THR083 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.5 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 2/12/18 MR

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A	1.	
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.	
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.	
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.	
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.	
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.	
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.	
Sufficient Volume:	☑Yes	☐No	☐N/A	8.	
Correct Containers Used:	☑Yes	☐No	☐N/A	9.	
-Pace Containers Used:	☑Yes	☐No	☐N/A		
Containers Intact:	☑Yes	☐No	☐N/A	10.	
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.	
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.	
-Includes date/time/ID/Analysis Matrix:	W				
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No		Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.	
Trip Blank Present:	☐Yes	☐No	☑N/A	16.	
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A		
Pace Trip Blank Lot # (if purchased):					

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i e out of hold, incorrect preservative, out of temp incorrect containers)

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 28, 2016

Michael Patinkin
Resolute Env. & Water Resources Consulting, LLC
1001 Weatherstone Pkwy
Woodstock GA 30188

TEL: (678) 232-9499
FAX: (888) 881-8219

RE: Troutman Sanders Plant Kraft

Dear Michael Patinkin: Order No: 1611F49

Analytical Environmental Services, Inc. received 15 samples on 11/16/2016 10:25:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

CHAIN OF CUSTODY

1611F49

Work Order: PLANT KRAFT PHASE I

Date: 11/15/16 Page 1 of 1

COMPANY:	ADDRESS:
GEORGIA POWER COMPANY	241 RALPH MCGILL BLVD ATLANTA, GA 30308
PHONE: 678.232.9499	FAX: —
SAMPLED BY: MICHAEL PATINKIN FORREST HOWARD (RESOLUTE)	SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	RCRA METALS	SPLP COPPER	EPA 8260 BTEX	EPA 8270 PAH's	EPA 8015 DRO	EPA 8015 GRO	EPA 8260 VOCs	REMARKS	No # of Containers
	PRESERVATION (See codes)						HNO3	HNO3	S/M +I	NA	NA	S/M +I	S/M +I		
1	SB-36-14-0-1.5	11/15/16	0745	X		SO	X	X						2 COOLERS	1
2	GW-36-14		0745	X		GW	X	X							1
3	SB-21-2-3		0900	X		SO	X			X			X		6
4	GW-21		0900	X		GW	X			X			X		7
5	SB-9-2-3		0930	X		SO			X	X	X	X			6
6	GW-9		0930	X		GW			X	X	X	X			4
7	SB-38-1.3-2.6		1000	X		SO			X	X	X	X			6
8	GW-38		1000	X		GW			X	X	X	X			4
9	SB-18-4-5		1115	X		SO	X			X			X		6
10	GW-18		1115	X		GW	X			X			X		4
11	SB-49-17		1230	X		SO			X	X	X	X			6
12	FB-5		1715	X		W	X	X		X	X	X	X		5
13	RB-5		1225	X		W	X	X		X	X	X	X		5
14	TW-DA1			X		W				X			X	RS 11/15/16	4

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1: MICHAEL PATINKIN	11/15/16 1745	1:	
2:		2:	10.25
3:		3:	

PROJECT INFORMATION

PROJECT NAME: TROUTMAN SANDERS PLANT KRAFT

PROJECT #: —

SITE ADDRESS: 155 CROSSGATE ROAD PORT WENTWORTH, GA

SEND REPORT TO: STEPHEN.WILSON@RESOLUTEFP.COM

INVOICE TO: (MICHAEL.PATINKIN@RESOLUTEFP.COM) (IF DIFFERENT FROM ABOVE) LEA MILLET (GEORGIA POWER)

QUOTE #: PO#:

RECEIPT

Total # of Containers 58 MP 11/15/16

Turnaround Time Request

- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other

STATE PROGRAM (if any): GEORGIA

E-mail? Fax?

DATA PACKAGE: I ○ II ○ III ✓ IV ○

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD:

OUT 11/15/16 VIA: FEDEX

IN / / VIA:

CLIENT (FedEx) UPS MAIL COURIER

GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 28-Nov-16

Client: Resolute Env. & Water Resources Consulting, LLC
Project: Troutman Sanders Plant Kraft
Lab ID: 1611F49

Case Narrative

Sample Receiving Non-conformance:

A Trip Blank was provided but not listed on the Chain of Custody. Trip blank analyzed at no cost to the client.

Two 4oz containers were received with no bottle labels. These two 4oz containers were received in the same bag as sample "SB-36-14-0-1.5", however the COC lists that this sample only has one container. Sample was logged in as one container while the extra 4oz jars were placed on hold per client request.

For sample "SB-18-4-5", the COC lists the sample as having 6 containers but only 4 were received. The sample was logged in and all analyses requested were place on the 2 oz jar as the missing jars were not received.

For sample "SB-49-1", the COC lists the sample ID as "SB-49-1" while the bottle label lists the sample ID as "SB-49-1.3-2.7". The sample was identified and logged in using the collection date and time information on the COC.

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-36-14-0-1.5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 7:45:00 AM
Lab ID:	1611F49-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.124		mg/Kg-dry	233460	1	11/22/2016 14:25	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.51		mg/Kg-dry	233239	1	11/18/2016 22:16	JL
Barium	12.9	4.51		mg/Kg-dry	233239	1	11/18/2016 22:16	JL
Cadmium	BRL	2.25		mg/Kg-dry	233239	1	11/18/2016 22:16	JL
Chromium	4.24	2.25		mg/Kg-dry	233239	1	11/18/2016 22:16	JL
Copper	2.80	2.25		mg/Kg-dry	233239	1	11/18/2016 22:16	JL
Lead	27.6	4.51		mg/Kg-dry	233239	1	11/18/2016 22:16	JL
Selenium	BRL	4.51		mg/Kg-dry	233239	1	11/18/2016 22:16	JL
Silver	BRL	2.25		mg/Kg-dry	233239	1	11/18/2016 22:16	JL
PERCENT MOISTURE D2216								
Percent Moisture	20.3	0		wt%	R330523	1	11/22/2016 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-36-14
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 7:45:00 AM
Lab ID:	1611F49-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Mercury, Total SW7470A					**(SW7470A)**			
Mercury	BRL	0.00020		mg/L	233338	1	11/21/2016 14:38	JR
METALS, TOTAL SW6010D					**(SW3010A)**			
Arsenic	BRL	0.0500		mg/L	233364	1	11/21/2016 22:45	JL
Barium	0.0243	0.0200		mg/L	233364	1	11/21/2016 22:45	JL
Cadmium	BRL	0.0050		mg/L	233364	1	11/21/2016 22:45	JL
Chromium	BRL	0.0100		mg/L	233364	1	11/21/2016 22:45	JL
Copper	BRL	0.0100		mg/L	233364	1	11/21/2016 22:45	JL
Lead	0.0307	0.0100		mg/L	233364	1	11/22/2016 15:10	JL
Selenium	BRL	0.0200		mg/L	233364	1	11/21/2016 22:45	JL
Silver	BRL	0.0100		mg/L	233364	1	11/21/2016 22:45	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-21-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 9:00:00 AM
Lab ID:	1611F49-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.0897		mg/Kg-dry	233460	1	11/22/2016 14:27	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,1,2,2-Tetrachloroethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,1,2-Trichloroethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,1-Dichloroethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,1-Dichloroethene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,2,4-Trichlorobenzene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,2-Dibromo-3-chloropropane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,2-Dibromoethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,2-Dichlorobenzene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,2-Dichloroethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,2-Dichloropropane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,3-Dichlorobenzene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
1,4-Dichlorobenzene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
2-Butanone	BRL	35		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
2-Hexanone	BRL	7.0		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
4-Methyl-2-pentanone	BRL	7.0		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Acetone	BRL	70		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Benzene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Bromodichloromethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Bromoform	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Bromomethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Carbon disulfide	BRL	7.0		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Carbon tetrachloride	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Chlorobenzene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Chloroethane	BRL	7.0		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Chloroform	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Chloromethane	BRL	7.0		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
cis-1,2-Dichloroethene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
cis-1,3-Dichloropropene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Cyclohexane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Dibromochloromethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Dichlorodifluoromethane	BRL	7.0		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Ethylbenzene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Freon-113	BRL	7.0		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Isopropylbenzene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
m,p-Xylene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Methyl acetate	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Methyl tert-butyl ether	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-21-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 9:00:00 AM
Lab ID:	1611F49-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Methylene chloride	BRL	14		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
o-Xylene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Styrene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Tetrachloroethene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Toluene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
trans-1,2-Dichloroethene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
trans-1,3-Dichloropropene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Trichloroethene	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Trichlorofluoromethane	BRL	3.5		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Vinyl chloride	BRL	7.0		ug/Kg-dry	233378	1	11/22/2016 16:12	MD
Surr: 4-Bromofluorobenzene	81.1	70-128		%REC	233378	1	11/22/2016 16:12	MD
Surr: Dibromofluoromethane	91.7	78.2-128		%REC	233378	1	11/22/2016 16:12	MD
Surr: Toluene-d8	87.8	76.5-116		%REC	233378	1	11/22/2016 16:12	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Acenaphthylene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
1-Methylnaphthalene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
2-Methylnaphthalene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Acenaphthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Fluorene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Phenanthrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Anthracene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Pyrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Benz(a)anthracene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Chrysene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Benzo(b)fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Benzo(k)fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Benzo(a)pyrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Dibenz(a,h)anthracene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Benzo(g,h,i)perylene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Indeno(1,2,3-cd)pyrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 11:17	RF
Surr: 2-Fluorobiphenyl	67.4	56.7-120		%REC	233172	1	11/23/2016 11:17	RF
Surr: 4-Terphenyl-d14	88.3	60-120		%REC	233172	1	11/23/2016 11:17	RF
Surr: Nitrobenzene-d5	68.4	52.6-120		%REC	233172	1	11/23/2016 11:17	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.05		mg/Kg-dry	233239	1	11/18/2016 22:20	JL
Barium	21.5	4.05		mg/Kg-dry	233239	1	11/18/2016 22:20	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-21-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 9:00:00 AM
Lab ID:	1611F49-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	2.02		mg/Kg-dry	233239	1	11/18/2016 22:20	JL
Chromium	3.66	2.02		mg/Kg-dry	233239	1	11/18/2016 22:20	JL
Lead	5.69	4.05		mg/Kg-dry	233239	1	11/18/2016 22:20	JL
Selenium	BRL	4.05		mg/Kg-dry	233239	1	11/18/2016 22:20	JL
Silver	BRL	2.02		mg/Kg-dry	233239	1	11/18/2016 22:20	JL
PERCENT MOISTURE D2216								
Percent Moisture	4.51	0		wt%	R330523	1	11/22/2016 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-21
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 9:00:00 AM
Lab ID:	1611F49-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
2-Butanone	BRL	50		ug/L	233581	1	11/22/2016 19:54	BN
2-Hexanone	BRL	10		ug/L	233581	1	11/22/2016 19:54	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233581	1	11/22/2016 19:54	BN
Acetone	BRL	50		ug/L	233581	1	11/22/2016 19:54	BN
Benzene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Bromodichloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Bromoform	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Bromomethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Carbon disulfide	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Carbon tetrachloride	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Chlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Chloroethane	BRL	10		ug/L	233581	1	11/22/2016 19:54	BN
Chloroform	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Chloromethane	BRL	10		ug/L	233581	1	11/22/2016 19:54	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Cyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Dibromochloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Dichlorodifluoromethane	BRL	10		ug/L	233581	1	11/22/2016 19:54	BN
Ethylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Freon-113	BRL	10		ug/L	233581	1	11/22/2016 19:54	BN
Isopropylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
m,p-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Methyl acetate	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Methylcyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Methylene chloride	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
o-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-21
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 9:00:00 AM
Lab ID:	1611F49-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Tetrachloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Toluene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Trichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233581	1	11/22/2016 19:54	BN
Vinyl chloride	BRL	2.0		ug/L	233581	1	11/22/2016 19:54	BN
Surr: 4-Bromofluorobenzene	82.1	66.1-129		%REC	233581	1	11/22/2016 19:54	BN
Surr: Dibromofluoromethane	96.4	83.6-123		%REC	233581	1	11/22/2016 19:54	BN
Surr: Toluene-d8	91.6	81.8-118		%REC	233581	1	11/22/2016 19:54	BN
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233338	1	11/21/2016 14:44	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Acenaphthylene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
1-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
2-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Acenaphthene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Fluorene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Phenanthrene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Anthracene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Pyrene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Benz(a)anthracene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Chrysene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Benzo(a)pyrene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233174	1	11/23/2016 13:41	RF
Surr: Nitrobenzene-d5	58.1	56.9-120		%REC	233174	1	11/23/2016 13:41	RF
Surr: 2-Fluorobiphenyl	58.5	55.6-120		%REC	233174	1	11/23/2016 13:41	RF
Surr: 4-Terphenyl-d14	85.6	45.7-120		%REC	233174	1	11/23/2016 13:41	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233364	1	11/21/2016 22:48	JL
Barium	0.146	0.0200		mg/L	233364	1	11/21/2016 22:48	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-21
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 9:00:00 AM
Lab ID:	1611F49-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233364	1	11/21/2016 22:48	JL
Chromium	0.0513	0.0100		mg/L	233364	1	11/21/2016 22:48	JL
Lead	BRL	0.0100		mg/L	233364	1	11/22/2016 15:13	JL
Selenium	BRL	0.0200		mg/L	233364	1	11/21/2016 22:48	JL
Silver	BRL	0.0100		mg/L	233364	1	11/21/2016 22:48	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-9-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 9:30:00 AM
Lab ID:	1611F49-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.77		ug/Kg-dry	233346	1	11/25/2016 21:46	JE
Toluene	BRL	0.77		ug/Kg-dry	233346	1	11/25/2016 21:46	JE
Ethylbenzene	BRL	0.77		ug/Kg-dry	233346	1	11/25/2016 21:46	JE
m,p-Xylene	BRL	0.77		ug/Kg-dry	233346	1	11/25/2016 21:46	JE
o-Xylene	BRL	0.77		ug/Kg-dry	233346	1	11/25/2016 21:46	JE
Surr: 4-Bromofluorobenzene	90.5	70-128		%REC	233346	1	11/25/2016 21:46	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Acenaphthylene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
1-Methylnaphthalene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
2-Methylnaphthalene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Acenaphthene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Fluorene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Phenanthrene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Anthracene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Fluoranthene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Pyrene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Benz(a)anthracene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Chrysene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Benzo(b)fluoranthene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Benzo(k)fluoranthene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Benzo(a)pyrene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Dibenz(a,h)anthracene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Benzo(g,h,i)perylene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Indeno(1,2,3-cd)pyrene	BRL	410		ug/Kg-dry	233172	1	11/23/2016 11:46	RF
Surr: 2-Fluorobiphenyl	69.3	56.7-120		%REC	233172	1	11/23/2016 11:46	RF
Surr: 4-Terphenyl-d14	90.4	60-120		%REC	233172	1	11/23/2016 11:46	RF
Surr: Nitrobenzene-d5	71.1	52.6-120		%REC	233172	1	11/23/2016 11:46	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.38		mg/Kg-dry	233346	1	11/25/2016 21:46	JE
Surr: a.a.a-trifluorotoluene	123	69.8-134		%REC	233346	1	11/25/2016 21:46	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.3		mg/Kg-dry	233249	1	11/21/2016 21:06	RF
Surr: Dioctylphthalate	81.6	50.1-122		%REC	233249	1	11/21/2016 21:06	RF
PERCENT MOISTURE D2216								
Percent Moisture	19.4	0		wt%	R330523	1	11/22/2016 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-9
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 9:30:00 AM
Lab ID:	1611F49-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Benzene	BRL	1.0		ug/L	233747	1	11/27/2016 20:14	JE
Toluene	BRL	1.0		ug/L	233747	1	11/27/2016 20:14	JE
Ethylbenzene	BRL	1.0		ug/L	233747	1	11/27/2016 20:14	JE
m,p-Xylene	BRL	1.0		ug/L	233747	1	11/27/2016 20:14	JE
o-Xylene	BRL	1.0		ug/L	233747	1	11/27/2016 20:14	JE
Surr: 4-Bromofluorobenzene	88.4	66.1-129		%REC	233747	1	11/27/2016 20:14	JE
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233747	1	11/27/2016 20:14	JE
Surr: a.a.a-trifluorotoluene	107	75.1-120		%REC	233747	1	11/27/2016 20:14	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/18/2016 16:50	RF
Surr: Dioctylphthalate	32.2	47-119	S	%REC	233098	1	11/18/2016 16:50	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Acenaphthylene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
1-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
2-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Acenaphthene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Fluorene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Phenanthrene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Anthracene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Pyrene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Benz(a)anthracene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Chrysene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Benzo(a)pyrene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233174	1	11/23/2016 14:09	RF
Surr: Nitrobenzene-d5	58.1	56.9-120		%REC	233174	1	11/23/2016 14:09	RF
Surr: 2-Fluorobiphenyl	60.6	55.6-120		%REC	233174	1	11/23/2016 14:09	RF
Surr: 4-Terphenyl-d14	86.2	45.7-120		%REC	233174	1	11/23/2016 14:09	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-38-1.3-2.6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 10:00:00 AM
Lab ID:	1611F49-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.76		ug/Kg-dry	233346	1	11/25/2016 22:16	JE
Toluene	BRL	0.76		ug/Kg-dry	233346	1	11/25/2016 22:16	JE
Ethylbenzene	BRL	0.76		ug/Kg-dry	233346	1	11/25/2016 22:16	JE
m,p-Xylene	BRL	0.76		ug/Kg-dry	233346	1	11/25/2016 22:16	JE
o-Xylene	BRL	0.76		ug/Kg-dry	233346	1	11/25/2016 22:16	JE
Surr: 4-Bromofluorobenzene	95	70-128		%REC	233346	1	11/25/2016 22:16	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Acenaphthylene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
1-Methylnaphthalene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
2-Methylnaphthalene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Acenaphthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Fluorene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Phenanthrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Anthracene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Pyrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Benz(a)anthracene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Chrysene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Benzo(b)fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Benzo(k)fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Benzo(a)pyrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Dibenz(a,h)anthracene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Benzo(g,h,i)perylene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Indeno(1,2,3-cd)pyrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 12:15	RF
Surr: 2-Fluorobiphenyl	67.8	56.7-120		%REC	233172	1	11/23/2016 12:15	RF
Surr: 4-Terphenyl-d14	86.8	60-120		%REC	233172	1	11/23/2016 12:15	RF
Surr: Nitrobenzene-d5	71.8	52.6-120		%REC	233172	1	11/23/2016 12:15	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.38		mg/Kg-dry	233346	1	11/25/2016 22:16	JE
Surr: a.a.a-trifluorotoluene	124	69.8-134		%REC	233346	1	11/25/2016 22:16	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	11	7.2		mg/Kg-dry	233249	1	11/21/2016 21:29	RF
Surr: Dioctylphthalate	71.9	50.1-122		%REC	233249	1	11/21/2016 21:29	RF
PERCENT MOISTURE D2216								
Percent Moisture	6.94	0		wt%	R330523	1	11/22/2016 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-38
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 10:00:00 AM
Lab ID:	1611F49-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Benzene	BRL	1.0		ug/L	233747	1	11/27/2016 20:44	JE
Toluene	BRL	1.0		ug/L	233747	1	11/27/2016 20:44	JE
Ethylbenzene	BRL	1.0		ug/L	233747	1	11/27/2016 20:44	JE
m,p-Xylene	BRL	1.0		ug/L	233747	1	11/27/2016 20:44	JE
o-Xylene	BRL	1.0		ug/L	233747	1	11/27/2016 20:44	JE
Surr: 4-Bromofluorobenzene	89.1	66.1-129		%REC	233747	1	11/27/2016 20:44	JE
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233747	1	11/27/2016 20:44	JE
Surr: a.a.a-trifluorotoluene	106	75.1-120		%REC	233747	1	11/27/2016 20:44	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/18/2016 17:13	RF
Surr: Dioctylphthalate	29	47-119	S	%REC	233098	1	11/18/2016 17:13	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Acenaphthylene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
1-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
2-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Acenaphthene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Fluorene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Phenanthrene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Anthracene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Pyrene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Benz(a)anthracene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Chrysene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Benzo(a)pyrene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233174	1	11/23/2016 14:38	RF
Surr: Nitrobenzene-d5	60.7	56.9-120		%REC	233174	1	11/23/2016 14:38	RF
Surr: 2-Fluorobiphenyl	59.5	55.6-120		%REC	233174	1	11/23/2016 14:38	RF
Surr: 4-Terphenyl-d14	84.2	45.7-120		%REC	233174	1	11/23/2016 14:38	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-18-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 11:15:00 AM
Lab ID:	1611F49-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.101		mg/Kg-dry	233460	1	11/22/2016 14:34	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,1,2,2-Tetrachloroethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,1,2-Trichloroethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,1-Dichloroethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,1-Dichloroethene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,2,4-Trichlorobenzene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,2-Dibromo-3-chloropropane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,2-Dibromoethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,2-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,2-Dichloroethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,2-Dichloropropane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,3-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
1,4-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
2-Butanone	BRL	39		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
2-Hexanone	BRL	7.7		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
4-Methyl-2-pentanone	BRL	7.7		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Acetone	BRL	77		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Benzene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Bromodichloromethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Bromoform	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Bromomethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Carbon disulfide	BRL	7.7		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Carbon tetrachloride	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Chlorobenzene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Chloroethane	BRL	7.7		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Chloroform	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Chloromethane	BRL	7.7		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
cis-1,2-Dichloroethene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
cis-1,3-Dichloropropene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Cyclohexane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Dibromochloromethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Dichlorodifluoromethane	BRL	7.7		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Ethylbenzene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Freon-113	BRL	7.7		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Isopropylbenzene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
m,p-Xylene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Methyl acetate	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Methyl tert-butyl ether	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-18-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 11:15:00 AM
Lab ID:	1611F49-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Methylene chloride	BRL	15		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
o-Xylene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Styrene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Tetrachloroethene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Toluene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
trans-1,2-Dichloroethene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
trans-1,3-Dichloropropene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Trichloroethene	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Trichlorofluoromethane	BRL	3.9		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Vinyl chloride	BRL	7.7		ug/Kg-dry	233378	1	11/22/2016 16:36	MD
Surr: 4-Bromofluorobenzene	89.9	70-128		%REC	233378	1	11/22/2016 16:36	MD
Surr: Dibromofluoromethane	94.4	78.2-128		%REC	233378	1	11/22/2016 16:36	MD
Surr: Toluene-d8	88.9	76.5-116		%REC	233378	1	11/22/2016 16:36	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Acenaphthylene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
1-Methylnaphthalene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
2-Methylnaphthalene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Acenaphthene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Fluorene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Phenanthrene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Anthracene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Pyrene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Benz(a)anthracene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Chrysene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Benzo(a)pyrene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	233172	1	11/23/2016 12:44	RF
Surr: 2-Fluorobiphenyl	61.5	56.7-120		%REC	233172	1	11/23/2016 12:44	RF
Surr: 4-Terphenyl-d14	77.7	60-120		%REC	233172	1	11/23/2016 12:44	RF
Surr: Nitrobenzene-d5	63.5	52.6-120		%REC	233172	1	11/23/2016 12:44	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.09		mg/Kg-dry	233239	1	11/18/2016 22:23	JL
Barium	36.0	4.09		mg/Kg-dry	233239	1	11/18/2016 22:23	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-18-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 11:15:00 AM
Lab ID:	1611F49-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	2.04		mg/Kg-dry	233239	1	11/18/2016 22:23	JL
Chromium	BRL	2.04		mg/Kg-dry	233239	1	11/18/2016 22:23	JL
Lead	BRL	4.09		mg/Kg-dry	233239	1	11/18/2016 22:23	JL
Selenium	BRL	4.09		mg/Kg-dry	233239	1	11/18/2016 22:23	JL
Silver	BRL	2.04		mg/Kg-dry	233239	1	11/18/2016 22:23	JL
PERCENT MOISTURE D2216								
Percent Moisture	15.8	0		wt%	R330523	1	11/22/2016 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-18
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 11:15:00 AM
Lab ID:	1611F49-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
2-Butanone	BRL	50		ug/L	233581	1	11/22/2016 21:50	BN
2-Hexanone	BRL	10		ug/L	233581	1	11/22/2016 21:50	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233581	1	11/22/2016 21:50	BN
Acetone	BRL	50		ug/L	233581	1	11/22/2016 21:50	BN
Benzene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Bromodichloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Bromoform	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Bromomethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Carbon disulfide	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Carbon tetrachloride	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Chlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Chloroethane	BRL	10		ug/L	233581	1	11/22/2016 21:50	BN
Chloroform	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Chloromethane	BRL	10		ug/L	233581	1	11/22/2016 21:50	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Cyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Dibromochloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Dichlorodifluoromethane	BRL	10		ug/L	233581	1	11/22/2016 21:50	BN
Ethylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Freon-113	BRL	10		ug/L	233581	1	11/22/2016 21:50	BN
Isopropylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
m,p-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Methyl acetate	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Methylcyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Methylene chloride	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
o-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-18
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 11:15:00 AM
Lab ID:	1611F49-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Tetrachloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Toluene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Trichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233581	1	11/22/2016 21:50	BN
Vinyl chloride	BRL	2.0		ug/L	233581	1	11/22/2016 21:50	BN
Surr: 4-Bromofluorobenzene	81.8	66.1-129		%REC	233581	1	11/22/2016 21:50	BN
Surr: Dibromofluoromethane	87.4	83.6-123		%REC	233581	1	11/22/2016 21:50	BN
Surr: Toluene-d8	88.9	81.8-118		%REC	233581	1	11/22/2016 21:50	BN
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233338	1	11/21/2016 14:46	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Acenaphthylene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
1-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
2-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Acenaphthene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Fluorene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Phenanthrene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Anthracene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Pyrene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Benz(a)anthracene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Chrysene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Benzo(a)pyrene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233174	1	11/23/2016 15:08	RF
Surr: Nitrobenzene-d5	47.8	56.9-120	S	%REC	233174	1	11/23/2016 15:08	RF
Surr: 2-Fluorobiphenyl	46.6	55.6-120	S	%REC	233174	1	11/23/2016 15:08	RF
Surr: 4-Terphenyl-d14	52.8	45.7-120		%REC	233174	1	11/23/2016 15:08	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233364	1	11/21/2016 22:52	JL
Barium	0.170	0.0200		mg/L	233364	1	11/21/2016 22:52	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-18
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 11:15:00 AM
Lab ID:	1611F49-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233364	1	11/21/2016 22:52	JL
Chromium	0.0464	0.0100		mg/L	233364	1	11/21/2016 22:52	JL
Lead	0.0188	0.0100		mg/L	233364	1	11/21/2016 22:52	JL
Selenium	BRL	0.0200		mg/L	233364	1	11/21/2016 22:52	JL
Silver	BRL	0.0100		mg/L	233364	1	11/21/2016 22:52	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-49-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 12:30:00 PM
Lab ID:	1611F49-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.70		ug/Kg-dry	233346	1	11/25/2016 22:46	JE
Toluene	BRL	0.70		ug/Kg-dry	233346	1	11/25/2016 22:46	JE
Ethylbenzene	BRL	0.70		ug/Kg-dry	233346	1	11/25/2016 22:46	JE
m,p-Xylene	BRL	0.70		ug/Kg-dry	233346	1	11/25/2016 22:46	JE
o-Xylene	BRL	0.70		ug/Kg-dry	233346	1	11/25/2016 22:46	JE
Surr: 4-Bromofluorobenzene	87.2	70-128		%REC	233346	1	11/25/2016 22:46	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Acenaphthylene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
1-Methylnaphthalene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
2-Methylnaphthalene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Acenaphthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Fluorene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Phenanthrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Anthracene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Pyrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Benz(a)anthracene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Chrysene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Benzo(b)fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Benzo(k)fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Benzo(a)pyrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Dibenz(a,h)anthracene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Benzo(g,h,i)perylene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Indeno(1,2,3-cd)pyrene	BRL	350		ug/Kg-dry	233172	1	11/23/2016 13:12	RF
Surr: 2-Fluorobiphenyl	66.6	56.7-120		%REC	233172	1	11/23/2016 13:12	RF
Surr: 4-Terphenyl-d14	86.7	60-120		%REC	233172	1	11/23/2016 13:12	RF
Surr: Nitrobenzene-d5	66.1	52.6-120		%REC	233172	1	11/23/2016 13:12	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.35		mg/Kg-dry	233346	1	11/25/2016 22:46	JE
Surr: a.a.a-trifluorotoluene	128	69.8-134		%REC	233346	1	11/25/2016 22:46	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	14	7.1		mg/Kg-dry	233249	1	11/21/2016 21:52	RF
Surr: Dioctylphthalate	68.9	50.1-122		%REC	233249	1	11/21/2016 21:52	RF
PERCENT MOISTURE D2216								
Percent Moisture	5.58	0		wt%	R330523	1	11/22/2016 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 5:15:00 PM
Lab ID:	1611F49-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
2-Butanone	BRL	50		ug/L	233581	1	11/22/2016 22:19	BN
2-Hexanone	BRL	10		ug/L	233581	1	11/22/2016 22:19	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233581	1	11/22/2016 22:19	BN
Acetone	BRL	50		ug/L	233581	1	11/22/2016 22:19	BN
Benzene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Bromodichloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Bromoform	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Bromomethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Carbon disulfide	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Carbon tetrachloride	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Chlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Chloroethane	BRL	10		ug/L	233581	1	11/22/2016 22:19	BN
Chloroform	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Chloromethane	BRL	10		ug/L	233581	1	11/22/2016 22:19	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Cyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Dibromochloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Dichlorodifluoromethane	BRL	10		ug/L	233581	1	11/22/2016 22:19	BN
Ethylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Freon-113	BRL	10		ug/L	233581	1	11/22/2016 22:19	BN
Isopropylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
m,p-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Methyl acetate	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Methylcyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Methylene chloride	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
o-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 5:15:00 PM
Lab ID:	1611F49-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Tetrachloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Toluene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Trichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233581	1	11/22/2016 22:19	BN
Vinyl chloride	BRL	2.0		ug/L	233581	1	11/22/2016 22:19	BN
Surr: 4-Bromofluorobenzene	79.2	66.1-129		%REC	233581	1	11/22/2016 22:19	BN
Surr: Dibromofluoromethane	90.7	83.6-123		%REC	233581	1	11/22/2016 22:19	BN
Surr: Toluene-d8	95.2	81.8-118		%REC	233581	1	11/22/2016 22:19	BN
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233338	1	11/21/2016 14:48	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233747	1	11/27/2016 21:13	JE
Surr: a.a.a-trifluorotoluene	110	75.1-120		%REC	233747	1	11/27/2016 21:13	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/18/2016 17:37	RF
Surr: Dioctylphthalate	78	47-119		%REC	233098	1	11/18/2016 17:37	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Acenaphthylene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
1-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
2-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Acenaphthene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Fluorene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Phenanthrene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Anthracene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Pyrene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Benz(a)anthracene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Chrysene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Benzo(a)pyrene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 5:15:00 PM
Lab ID:	1611F49-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233174	1	11/23/2016 15:37	RF
Surr: Nitrobenzene-d5	66.7	56.9-120		%REC	233174	1	11/23/2016 15:37	RF
Surr: 2-Fluorobiphenyl	65.5	55.6-120		%REC	233174	1	11/23/2016 15:37	RF
Surr: 4-Terphenyl-d14	90	45.7-120		%REC	233174	1	11/23/2016 15:37	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233364	1	11/21/2016 22:55	JL
Barium	BRL	0.0200		mg/L	233364	1	11/21/2016 22:55	JL
Cadmium	BRL	0.0050		mg/L	233364	1	11/21/2016 22:55	JL
Chromium	BRL	0.0100		mg/L	233364	1	11/21/2016 22:55	JL
Copper	BRL	0.0100		mg/L	233364	1	11/21/2016 22:55	JL
Lead	BRL	0.0100		mg/L	233364	1	11/21/2016 22:55	JL
Selenium	BRL	0.0200		mg/L	233364	1	11/21/2016 22:55	JL
Silver	BRL	0.0100		mg/L	233364	1	11/21/2016 22:55	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 5:25:00 PM
Lab ID:	1611F49-013	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
2-Butanone	BRL	50		ug/L	233581	1	11/23/2016 11:49	BN
2-Hexanone	BRL	10		ug/L	233581	1	11/23/2016 11:49	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233581	1	11/23/2016 11:49	BN
Acetone	BRL	50		ug/L	233581	1	11/23/2016 11:49	BN
Benzene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Bromodichloromethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Bromoform	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Bromomethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Carbon disulfide	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Carbon tetrachloride	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Chlorobenzene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Chloroethane	BRL	10		ug/L	233581	1	11/23/2016 11:49	BN
Chloroform	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Chloromethane	BRL	10		ug/L	233581	1	11/23/2016 11:49	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Cyclohexane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Dibromochloromethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Dichlorodifluoromethane	BRL	10		ug/L	233581	1	11/23/2016 11:49	BN
Ethylbenzene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Freon-113	BRL	10		ug/L	233581	1	11/23/2016 11:49	BN
Isopropylbenzene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
m,p-Xylene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Methyl acetate	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Methylcyclohexane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Methylene chloride	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
o-Xylene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 5:25:00 PM
Lab ID:	1611F49-013	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Tetrachloroethene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Toluene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Trichloroethene	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233581	1	11/23/2016 11:49	BN
Vinyl chloride	BRL	2.0		ug/L	233581	1	11/23/2016 11:49	BN
Surr: 4-Bromofluorobenzene	83.2	66.1-129		%REC	233581	1	11/23/2016 11:49	BN
Surr: Dibromofluoromethane	95.7	83.6-123		%REC	233581	1	11/23/2016 11:49	BN
Surr: Toluene-d8	98.5	81.8-118		%REC	233581	1	11/23/2016 11:49	BN
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233338	1	11/21/2016 14:50	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233747	1	11/27/2016 21:42	JE
Surr: a.a.a-trifluorotoluene	108	75.1-120		%REC	233747	1	11/27/2016 21:42	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/18/2016 18:00	RF
Surr: Dioctylphthalate	63.4	47-119		%REC	233098	1	11/18/2016 18:00	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Acenaphthylene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
1-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
2-Methylnaphthalene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Acenaphthene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Fluorene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Phenanthrene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Anthracene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Pyrene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Benz(a)anthracene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Chrysene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Benzo(a)pyrene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
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- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016 5:25:00 PM
Lab ID:	1611F49-013	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233174	1	11/23/2016 16:06	RF
Surr: Nitrobenzene-d5	64	56.9-120		%REC	233174	1	11/23/2016 16:06	RF
Surr: 2-Fluorobiphenyl	64.4	55.6-120		%REC	233174	1	11/23/2016 16:06	RF
Surr: 4-Terphenyl-d14	93.4	45.7-120		%REC	233174	1	11/23/2016 16:06	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233364	1	11/21/2016 23:05	JL
Barium	BRL	0.0200		mg/L	233364	1	11/21/2016 23:05	JL
Cadmium	BRL	0.0050		mg/L	233364	1	11/21/2016 23:05	JL
Chromium	BRL	0.0100		mg/L	233364	1	11/21/2016 23:05	JL
Copper	BRL	0.0100		mg/L	233364	1	11/21/2016 23:05	JL
Lead	BRL	0.0100		mg/L	233364	1	11/21/2016 23:05	JL
Selenium	BRL	0.0200		mg/L	233364	1	11/21/2016 23:05	JL
Silver	BRL	0.0100		mg/L	233364	1	11/21/2016 23:05	JL

Qualifiers:

- * Value exceeds maximum contaminant level
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- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK 1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/16/2016
Lab ID:	1611F49-014	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
2-Butanone	BRL	50		ug/L	233581	1	11/22/2016 23:17	BN
2-Hexanone	BRL	10		ug/L	233581	1	11/22/2016 23:17	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233581	1	11/22/2016 23:17	BN
Acetone	BRL	50		ug/L	233581	1	11/22/2016 23:17	BN
Benzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Bromodichloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Bromoform	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Bromomethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Carbon disulfide	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Carbon tetrachloride	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Chlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Chloroethane	BRL	10		ug/L	233581	1	11/22/2016 23:17	BN
Chloroform	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Chloromethane	BRL	10		ug/L	233581	1	11/22/2016 23:17	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Cyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Dibromochloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Dichlorodifluoromethane	BRL	10		ug/L	233581	1	11/22/2016 23:17	BN
Ethylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Freon-113	BRL	10		ug/L	233581	1	11/22/2016 23:17	BN
Isopropylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
m,p-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Methyl acetate	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Methylcyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Methylene chloride	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
o-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK 1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/16/2016
Lab ID:	1611F49-014	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Tetrachloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Toluene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Trichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:17	BN
Vinyl chloride	BRL	2.0		ug/L	233581	1	11/22/2016 23:17	BN
Surr: 4-Bromofluorobenzene	84.1	66.1-129		%REC	233581	1	11/22/2016 23:17	BN
Surr: Dibromofluoromethane	91.1	83.6-123		%REC	233581	1	11/22/2016 23:17	BN
Surr: Toluene-d8	93.7	81.8-118		%REC	233581	1	11/22/2016 23:17	BN

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK 2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/16/2016
Lab ID:	1611F49-015	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
2-Butanone	BRL	50		ug/L	233581	1	11/22/2016 23:46	BN
2-Hexanone	BRL	10		ug/L	233581	1	11/22/2016 23:46	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233581	1	11/22/2016 23:46	BN
Acetone	BRL	50		ug/L	233581	1	11/22/2016 23:46	BN
Benzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Bromodichloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Bromoform	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Bromomethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Carbon disulfide	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Carbon tetrachloride	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Chlorobenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Chloroethane	BRL	10		ug/L	233581	1	11/22/2016 23:46	BN
Chloroform	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Chloromethane	BRL	10		ug/L	233581	1	11/22/2016 23:46	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Cyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Dibromochloromethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Dichlorodifluoromethane	BRL	10		ug/L	233581	1	11/22/2016 23:46	BN
Ethylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Freon-113	BRL	10		ug/L	233581	1	11/22/2016 23:46	BN
Isopropylbenzene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
m,p-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Methyl acetate	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Methylcyclohexane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Methylene chloride	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
o-Xylene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK 2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/16/2016
Lab ID:	1611F49-015	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Tetrachloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Toluene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Trichloroethene	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233581	1	11/22/2016 23:46	BN
Vinyl chloride	BRL	2.0		ug/L	233581	1	11/22/2016 23:46	BN
Surr: 4-Bromofluorobenzene	83	66.1-129		%REC	233581	1	11/22/2016 23:46	BN
Surr: Dibromofluoromethane	86.6	83.6-123		%REC	233581	1	11/22/2016 23:46	BN
Surr: Toluene-d8	90.5	81.8-118		%REC	233581	1	11/22/2016 23:46	BN

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Resolute 16A Burn Work Order Number 1011F49

Checklist completed by Alyssa Bridge 11/10/16
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes ✓ No __ Not Present __

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 2.3 Cooler #2 2.1 Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes __ No ✓

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by AJ

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233098

Sample ID: **MB-233098**	Client ID:				Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330243**
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233098**		Analysis Date: **11/17/2016**		Seq No: **7178069**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	BRL	0.20									
Surr: Dioctylphthalate	0.06967	0	0.1000		69.7	47	119				

Sample ID: **LCS-233098**	Client ID:				Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330243**
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233098**		Analysis Date: **11/17/2016**		Seq No: **7178070**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	1.074	0.20	1.000		107	51.3	122				
Surr: Dioctylphthalate	0.08794	0	0.1000		87.9	47	119				

Sample ID: **LCSD-233098**	Client ID:				Units: **mg/L**		Prep Date: **11/17/2016**		Run No: **330243**
SampleType: **LCSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233098**		Analysis Date: **11/17/2016**		Seq No: **7178071**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	1.060	0.20	1.000		106	51.3	122	1.074	1.27	33.5	
Surr: Dioctylphthalate	0.09022	0	0.1000		90.2	47	119	0.08794	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233172

Sample ID: **MB-233172** Client ID: Units: **ug/Kg** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **MBLK** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181036**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	BRL	330									
2-Methylnaphthalene	BRL	330									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Anthracene	BRL	330									
Benz(a)anthracene	BRL	330									
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Chrysene	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Naphthalene	BRL	330									
Phenanthrene	BRL	330									
Pyrene	BRL	330									
Surr: 2-Fluorobiphenyl	1163	0	1667		69.8	56.7	120				
Surr: 4-Terphenyl-d14	1286	0	1667		77.2	60	120				
Surr: Nitrobenzene-d5	1275	0	1667		76.5	52.6	120				

Sample ID: **LCS-233172** Client ID: Units: **ug/Kg** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181037**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1203	330	1667		72.2	66.4	120				
2-Methylnaphthalene	1155	330	1667		69.3	64.8	120				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233172

Sample ID: **LCS-233172** Client ID: Units: **ug/Kg** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181037**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1261	330	1667		75.6	70.1	120				
Acenaphthylene	1260	330	1667		75.6	68.5	120				
Anthracene	1257	330	1667		75.4	71.7	120				
Benz(a)anthracene	1344	330	1667		80.6	74.9	120				
Benzo(a)pyrene	1293	330	1667		77.6	64.3	120				
Benzo(b)fluoranthene	1490	330	1667		89.4	69.9	120				
Benzo(g,h,i)perylene	1333	330	1667		80.0	70.9	120				
Benzo(k)fluoranthene	1283	330	1667		77.0	67.3	120				
Chrysene	1303	330	1667		78.2	74.1	120				
Dibenz(a,h)anthracene	1327	330	1667		79.6	62.7	120				
Fluoranthene	1324	330	1667		79.4	74.6	120				
Fluorene	1259	330	1667		75.6	72.2	120				
Indeno(1,2,3-cd)pyrene	1325	330	1667		79.5	66.3	120				
Naphthalene	1209	330	1667		72.6	63.5	120				
Phenanthrene	1309	330	1667		78.5	73.5	120				
Pyrene	1314	330	1667		78.9	67.9	120				
Surr: 2-Fluorobiphenyl	1143	0	1667		68.6	56.7	120				
Surr: 4-Terphenyl-d14	1193	0	1667		71.6	60	120				
Surr: Nitrobenzene-d5	1141	0	1667		68.4	52.6	120				

Sample ID: **1611D75-008BMS** Client ID: Units: **ug/Kg-dry** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181039**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1556	390	1960		79.4	61.1	120				
2-Methylnaphthalene	1507	390	1960		76.9	57.4	120				
Acenaphthene	1639	390	1960		83.6	60.2	120				
Acenaphthylene	1601	390	1960		81.7	59.9	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233172

Sample ID: **1611D75-008BMS** Client ID:
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D**
Units: **ug/Kg-dry** Prep Date: **11/18/2016** Run No: **330234**
BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181039**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	1682	390	1960		85.8	59.6	120				
Benz(a)anthracene	1774	390	1960		90.5	64.8	120				
Benzo(a)pyrene	1730	390	1960		88.3	56.1	120				
Benzo(b)fluoranthene	1931	390	1960		98.5	60	126				
Benzo(g,h,i)perylene	1766	390	1960		90.1	56.1	123				
Benzo(k)fluoranthene	1682	390	1960		85.8	55.2	120				
Chrysene	1753	390	1960		89.4	57.9	120				
Dibenz(a,h)anthracene	1717	390	1960		87.6	54.4	119				
Fluoranthene	1796	390	1960		91.6	58.3	119				
Fluorene	1652	390	1960		84.3	61.9	120				
Indeno(1,2,3-cd)pyrene	1714	390	1960		87.4	52.4	124				
Naphthalene	1534	390	1960		78.2	52.7	120				
Phenanthrene	1704	390	1960		86.9	57.7	120				
Pyrene	1750	390	1960		89.3	57.9	120				
Surr: 2-Fluorobiphenyl	1460	0	1960		74.5	56.7	120				
Surr: 4-Terphenyl-d14	1609	0	1960		82.1	60	120				
Surr: Nitrobenzene-d5	1531	0	1960		78.1	52.6	120				

Sample ID: **1611D75-008BMSD** Client ID:
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D**
Units: **ug/Kg-dry** Prep Date: **11/18/2016** Run No: **330234**
BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181040**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1551	390	1960		79.1	61.1	120	1556	0.303	20	
2-Methylnaphthalene	1485	390	1960		75.8	57.4	120	1507	1.49	20.9	
Acenaphthene	1623	390	1960		82.8	60.2	120	1639	0.937	22.6	
Acenaphthylene	1570	390	1960		80.1	59.9	120	1601	1.98	26.3	
Anthracene	1603	390	1960		81.8	59.6	120	1682	4.82	24.5	
Benz(a)anthracene	1685	390	1960		86.0	64.8	120	1774	5.15	20.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233172

Sample ID: **1611D75-008BMSD** Client ID:
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D**
Units: **ug/Kg-dry** Prep Date: **11/18/2016** Run No: **330234**
BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181040**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1594	390	1960		81.3	56.1	120	1730	8.21	21.1	
Benzo(b)fluoranthene	1825	390	1960		93.1	60	126	1931	5.66	23	
Benzo(g,h,i)perylene	1666	390	1960		85.0	56.1	123	1766	5.85	22.6	
Benzo(k)fluoranthene	1578	390	1960		80.5	55.2	120	1682	6.35	30	
Chrysene	1656	390	1960		84.5	57.9	120	1753	5.66	20.9	
Dibenz(a,h)anthracene	1625	390	1960		82.9	54.4	119	1717	5.49	26.9	
Fluoranthene	1690	390	1960		86.2	58.3	119	1796	6.07	26.6	
Fluorene	1537	390	1960		78.4	61.9	120	1652	7.23	23.8	
Indeno(1,2,3-cd)pyrene	1622	390	1960		82.8	52.4	124	1714	5.48	30.1	
Naphthalene	1527	390	1960		77.9	52.7	120	1534	0.436	22.1	
Phenanthrene	1616	390	1960		82.4	57.7	120	1704	5.31	25.8	
Pyrene	1639	390	1960		83.6	57.9	120	1750	6.57	25.2	
Surr: 2-Fluorobiphenyl	1496	0	1960		76.3	56.7	120	1460	0	0	
Surr: 4-Terphenyl-d14	1531	0	1960		78.1	60	120	1609	0	0	
Surr: Nitrobenzene-d5	1597	0	1960		81.5	52.6	120	1531	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233174

Sample ID: **MB-233174** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330233**
SampleType: **MBLK** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233174** Analysis Date: **11/18/2016** Seq No: **7181133**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	BRL	10									
2-Methylnaphthalene	BRL	10									
Acenaphthene	BRL	10									
Acenaphthylene	BRL	10									
Anthracene	BRL	10									
Benz(a)anthracene	BRL	10									
Benzo(a)pyrene	BRL	10									
Benzo(b)fluoranthene	BRL	10									
Benzo(g,h,i)perylene	BRL	10									
Benzo(k)fluoranthene	BRL	10									
Chrysene	BRL	10									
Dibenz(a,h)anthracene	BRL	10									
Fluoranthene	BRL	10									
Fluorene	BRL	10									
Indeno(1,2,3-cd)pyrene	BRL	10									
Naphthalene	BRL	10									
Phenanthrene	BRL	10									
Pyrene	BRL	10									
Surr: 2-Fluorobiphenyl	36.12	0	50.00		72.2	55.6	120				
Surr: 4-Terphenyl-d14	36.82	0	50.00		73.6	45.7	120				
Surr: Nitrobenzene-d5	39.36	0	50.00		78.7	56.9	120				

Sample ID: **LCS-233174** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330233**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233174** Analysis Date: **11/18/2016** Seq No: **7181134**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	41.48	10	50.00		83.0	67.6	120				
2-Methylnaphthalene	39.33	10	50.00		78.7	65.5	120				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233174

Sample ID: **LCS-233174** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330233**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233174** Analysis Date: **11/18/2016** Seq No: **7181134**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	43.29	10	50.00		86.6	70	120				
Acenaphthylene	43.39	10	50.00		86.8	70	120				
Anthracene	45.51	10	50.00		91.0	70	120				
Benz(a)anthracene	47.49	10	50.00		95.0	70	117				
Benzo(a)pyrene	46.74	10	50.00		93.5	70	117				
Benzo(b)fluoranthene	49.06	10	50.00		98.1	70	130				
Benzo(g,h,i)perylene	46.46	10	50.00		92.9	68.6	127				
Benzo(k)fluoranthene	46.07	10	50.00		92.1	70	120				
Chrysene	46.02	10	50.00		92.0	70	120				
Dibenz(a,h)anthracene	45.26	10	50.00		90.5	64.3	123				
Fluoranthene	47.90	10	50.00		95.8	70	120				
Fluorene	44.27	10	50.00		88.5	70	120				
Indeno(1,2,3-cd)pyrene	46.10	10	50.00		92.2	66.5	123				
Naphthalene	40.98	10	50.00		82.0	64.1	120				
Phenanthrene	46.16	10	50.00		92.3	70	120				
Pyrene	46.20	10	50.00		92.4	70	120				
Surr: 2-Fluorobiphenyl	39.16	0	50.00		78.3	55.6	120				
Surr: 4-Terphenyl-d14	42.52	0	50.00		85.0	45.7	120				
Surr: Nitrobenzene-d5	41.80	0	50.00		83.6	56.9	120				

Sample ID: **1611656-006BMS** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330233**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233174** Analysis Date: **11/19/2016** Seq No: **7181163**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	38.87	10	50.00		77.7	57.6	120				
2-Methylnaphthalene	37.66	10	50.00		75.3	52.1	120				
Acenaphthene	44.45	10	50.00		88.9	56.5	119				
Acenaphthylene	42.93	10	50.00		85.9	60.6	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233174

Sample ID: **1611656-006BMS** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330233**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233174** Analysis Date: **11/19/2016** Seq No: **7181163**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	45.30	10	50.00		90.6	60	121				
Benz(a)anthracene	46.05	10	50.00		92.1	70.9	122				
Benzo(a)pyrene	46.15	10	50.00		92.3	61.2	122				
Benzo(b)fluoranthene	47.92	10	50.00		95.8	66	133				
Benzo(g,h,i)perylene	44.67	10	50.00		89.3	59	131				
Benzo(k)fluoranthene	44.08	10	50.00		88.2	64	120				
Chrysene	46.28	10	50.00		92.6	70.8	120				
Dibenz(a,h)anthracene	44.36	10	50.00		88.7	55.5	127				
Fluoranthene	47.33	10	50.00		94.7	71.9	121				
Fluorene	43.94	10	50.00		87.9	64.4	118				
Indeno(1,2,3-cd)pyrene	44.71	10	50.00		89.4	58.1	128				
Naphthalene	36.71	10	50.00		73.4	51.3	120				
Phenanthrene	46.23	10	50.00		92.5	70.7	120				
Pyrene	46.44	10	50.00		92.9	60.9	123				
Surr: 2-Fluorobiphenyl	35.74	0	50.00		71.5	55.6	120				
Surr: 4-Terphenyl-d14	39.27	0	50.00		78.5	45.7	120				
Surr: Nitrobenzene-d5	21.39	0	50.00		42.8	56.9	120				S

Sample ID: **1611656-006BMSD** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330233**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233174** Analysis Date: **11/19/2016** Seq No: **7181164**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	36.00	10	50.00		72.0	57.6	120	38.87	7.67	23.3	
2-Methylnaphthalene	32.97	10	50.00		65.9	52.1	120	37.66	13.3	24	
Acenaphthene	39.76	10	50.00		79.5	56.5	119	44.45	11.1	20.7	
Acenaphthylene	39.22	10	50.00		78.4	60.6	120	42.93	9.03	20.5	
Anthracene	43.05	10	50.00		86.1	60	121	45.30	5.09	22.4	
Benz(a)anthracene	45.58	10	50.00		91.2	70.9	122	46.05	1.03	18.6	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233174

Sample ID: **1611656-006BMSD** Client ID:
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D**
Units: **ug/L** Prep Date: **11/18/2016** Run No: **330233**
BatchID: **233174** Analysis Date: **11/19/2016** Seq No: **7181164**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(a)pyrene	45.18	10	50.00		90.4	61.2	122	46.15	2.12	22.2	
Benzo(b)fluoranthene	48.39	10	50.00		96.8	66	133	47.92	0.976	19.3	
Benzo(g,h,i)perylene	44.18	10	50.00		88.4	59	131	44.67	1.10	20.5	
Benzo(k)fluoranthene	42.05	10	50.00		84.1	64	120	44.08	4.71	19.7	
Chrysene	44.15	10	50.00		88.3	70.8	120	46.28	4.71	17.4	
Dibenz(a,h)anthracene	42.53	10	50.00		85.1	55.5	127	44.36	4.21	22.6	
Fluoranthene	45.95	10	50.00		91.9	71.9	121	47.33	2.96	20	
Fluorene	41.26	10	50.00		82.5	64.4	118	43.94	6.29	19.9	
Indeno(1,2,3-cd)pyrene	43.61	10	50.00		87.2	58.1	128	44.71	2.49	20.8	
Naphthalene	32.44	10	50.00		64.9	51.3	120	36.71	12.4	21.5	
Phenanthrene	43.54	10	50.00		87.1	70.7	120	46.23	5.99	20	
Pyrene	45.49	10	50.00		91.0	60.9	123	46.44	2.07	18.6	
Surr: 2-Fluorobiphenyl	33.50	0	50.00		67.0	55.6	120	35.74	0	0	
Surr: 4-Terphenyl-d14	39.45	0	50.00		78.9	45.7	120	39.27	0	0	
Surr: Nitrobenzene-d5	20.97	0	50.00		41.9	56.9	120	21.39	0	0	S

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233239

Sample ID: **MB-233239** Client ID: Units: **mg/Kg** Prep Date: **11/18/2016** Run No: **330360**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010D** BatchID: **233239** Analysis Date: **11/18/2016** Seq No: **7181803**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Cadmium	BRL	2.50									
Chromium	BRL	2.50									
Copper	BRL	2.50									
Lead	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									

Sample ID: **LCS-233239** Client ID: Units: **mg/Kg** Prep Date: **11/18/2016** Run No: **330360**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233239** Analysis Date: **11/18/2016** Seq No: **7181804**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	41.16	5.00	50.00		82.3	80	120				
Barium	46.35	5.00	50.00		92.7	80	120				
Cadmium	43.33	2.50	50.00	0.04250	86.6	80	120				
Chromium	46.59	2.50	50.00	0.06450	93.1	80	120				
Copper	47.30	2.50	50.00		94.6	80	120				
Lead	44.37	5.00	50.00		88.7	80	120				
Silver	4.460	2.50	5.000		89.2	80	120				

Sample ID: **LCS-233239** Client ID: Units: **mg/Kg** Prep Date: **11/18/2016** Run No: **330360**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233239** Analysis Date: **11/21/2016** Seq No: **7182285**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Selenium	40.28	5.00	50.00		80.6	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233239

Sample ID: **1611C79-001AMS** Client ID:
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010D**
Units: **mg/Kg-dry** Prep Date: **11/18/2016** Run No: **330360**
BatchID: **233239** Analysis Date: **11/18/2016** Seq No: **7181808**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	34.58	3.96	39.65	0.3691	86.3	75	125				
Barium	47.93	3.96	39.65	8.457	99.6	75	125				
Cadmium	35.78	1.98	39.65	0.1179	89.9	75	125				
Chromium	41.85	1.98	39.65	3.368	97.1	75	125				
Copper	44.38	1.98	39.65	3.406	103	75	125				
Lead	49.90	3.96	39.65	8.310	105	75	125				
Selenium	28.91	3.96	39.65		72.9	75	125				S
Silver	3.635	1.98	3.965	0.01958	91.2	75	125				

Sample ID: **1611C79-001AMSD** Client ID:
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010D**
Units: **mg/Kg-dry** Prep Date: **11/18/2016** Run No: **330360**
BatchID: **233239** Analysis Date: **11/18/2016** Seq No: **7181809**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	33.35	3.85	38.47	0.3691	85.7	75	125	34.58	3.62	20	
Barium	45.70	3.85	38.47	8.457	96.8	75	125	47.93	4.76	20	
Cadmium	35.19	1.92	38.47	0.1179	91.2	75	125	35.78	1.65	20	
Chromium	40.97	1.92	38.47	3.368	97.7	75	125	41.85	2.13	20	
Copper	42.59	1.92	38.47	3.406	102	75	125	44.38	4.13	20	
Lead	45.18	3.85	38.47	8.310	95.8	75	125	49.90	9.95	20	
Selenium	28.31	3.85	38.47		73.6	75	125	28.91	2.10	20	S
Silver	3.580	1.92	3.847	0.01958	92.6	75	125	3.635	1.51	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233249

Sample ID: **MB-233249**	Client ID:				Units: **mg/Kg**		Prep Date: **11/22/2016**		Run No: **330347**
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233249**		Analysis Date: **11/21/2016**		Seq No: **7182058**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.833	0	3.300		85.8	50.1	122				

Sample ID: **LCS-233249**	Client ID:				Units: **mg/Kg**		Prep Date: **11/22/2016**		Run No: **330347**
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233249**		Analysis Date: **11/21/2016**		Seq No: **7182059**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	32.60	6.7	33.30	1.172	94.4	56.4	119				
Surr: Dioctylphthalate	2.603	0	3.330		78.2	50.1	122				

Sample ID: **1611D77-007BMS**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **11/22/2016**		Run No: **330347**
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233249**		Analysis Date: **11/21/2016**		Seq No: **7184830**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	45.99	8.3	41.21	26.41	47.5	43.6	123				
Surr: Dioctylphthalate	3.268	0	4.121		79.3	50.1	122				

Sample ID: **1611D77-007BMSD**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **11/22/2016**		Run No: **330347**
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233249**		Analysis Date: **11/21/2016**		Seq No: **7184831**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	51.85	8.3	41.21	26.41	61.7	43.6	123	45.99	12.0	25.7	
Surr: Dioctylphthalate	3.375	0	4.121		81.9	50.1	122	3.268	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233338

Sample ID: **MB-233338**	Client ID:					Units: **mg/L**		Prep Date: **11/21/2016**		Run No: **330389**	
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**					BatchID: **233338**		Analysis Date: **11/21/2016**		Seq No: **7182549**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-233338**	Client ID:					Units: **mg/L**		Prep Date: **11/21/2016**		Run No: **330389**	
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**					BatchID: **233338**		Analysis Date: **11/21/2016**		Seq No: **7182550**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005295	0.00020	0.0050		106	80	120				

Sample ID: **1611E70-002AMS**	Client ID:					Units: **mg/L**		Prep Date: **11/21/2016**		Run No: **330389**	
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**					BatchID: **233338**		Analysis Date: **11/21/2016**		Seq No: **7182552**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005320	0.00020	0.0050		106	70	130				

Sample ID: **1611E70-002AMSD**	Client ID:					Units: **mg/L**		Prep Date: **11/21/2016**		Run No: **330389**	
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**					BatchID: **233338**		Analysis Date: **11/21/2016**		Seq No: **7182553**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005284	0.00020	0.0050		106	70	130	0.005320	0.673	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233346

Sample ID: **MB-233346**	Client ID:				Units: **ug/Kg**		Prep Date: **11/18/2016**		Run No: **330343**	
SampleType: **MBLK**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233346**		Analysis Date: **11/18/2016**		Seq No: **7181426**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
m,p-Xylene	BRL	1.0									
o-Xylene	BRL	1.0									
Toluene	BRL	1.0									
Surr: 4-Bromofluorobenzene	41.51	0	50.00		83.0	70	128				

Sample ID: **MB-233346**	Client ID:				Units: **mg/Kg**		Prep Date: **11/18/2016**		Run No: **330346**	
SampleType: **MBLK**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233346**		Analysis Date: **11/18/2016**		Seq No: **7181549**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	BRL	0.50									
Surr: a.a.a-trifluorotoluene	0.06197	0	0.0500		124	69.8	134				

Sample ID: **LCS-233346**	Client ID:				Units: **ug/Kg**		Prep Date: **11/18/2016**		Run No: **330343**	
SampleType: **LCS**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233346**		Analysis Date: **11/18/2016**		Seq No: **7181427**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	55.86	1.0	50.00		112	72.3	130				
Ethylbenzene	57.83	1.0	50.00		116	70.4	130				
m,p-Xylene	118.1	1.0	100.0		118	70.1	130				
o-Xylene	58.36	1.0	50.00		117	70.1	128				
Toluene	55.61	1.0	50.00		111	71.1	130				
Surr: 4-Bromofluorobenzene	49.06	0	50.00		98.1	70	128				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233346

Sample ID: **LCS-233346**	Client ID:				Units: **mg/Kg**		Prep Date: **11/18/2016**		Run No: **330346**	
SampleType: **LCS**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233346**		Analysis Date: **11/18/2016**		Seq No: **7181550**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
TPH (Gasoline Range Organics)	1.090	0.50	1.000		109	68.9	129			
Surr: a.a.a-trifluorotoluene	0.06326	0	0.0500		127	69.8	134			

Sample ID: **1611H47-001AMS**	Client ID:				Units: **ug/Kg-dry**		Prep Date: **11/18/2016**		Run No: **330343**	
SampleType: **MS**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233346**		Analysis Date: **11/18/2016**		Seq No: **7181429**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Benzene	104.7	2.3	115.4		90.8	70.4	130			
Ethylbenzene	103.1	2.3	115.4		89.4	64.9	136			
m,p-Xylene	211.4	2.3	230.7		91.6	60.2	138			
o-Xylene	106.3	2.3	115.4		92.1	61.5	134			
Toluene	100.5	2.3	115.4		87.1	70.4	130			
Surr: 4-Bromofluorobenzene	109.1	0	115.4		94.6	70	128			

Sample ID: **1611H47-001AMS**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **11/18/2016**		Run No: **330346**	
SampleType: **MS**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233346**		Analysis Date: **11/18/2016**		Seq No: **7181552**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
TPH (Gasoline Range Organics)	2.267	1.2	2.307		98.3	61.1	134			
Surr: a.a.a-trifluorotoluene	0.1465	0	0.1154		127	69.8	134			

Sample ID: **1611H47-001AMSD**	Client ID:				Units: **ug/Kg-dry**		Prep Date: **11/18/2016**		Run No: **330343**	
SampleType: **MSD**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233346**		Analysis Date: **11/18/2016**		Seq No: **7181430**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Benzene	107.6	2.3	115.4		93.3	70.4	130	104.7	2.72	16.9
Ethylbenzene	103.0	2.3	115.4		89.3	64.9	136	103.1	0.134	16.3
m,p-Xylene	210.0	2.3	230.7		91.0	60.2	138	211.4	0.657	16.3

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233346

Sample ID: **1611H47-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **11/18/2016** Run No: **330343**
SampleType: **MSD** TestCode: **VOLATILE ORGANICS SW8260B** BatchID: **233346** Analysis Date: **11/18/2016** Seq No: **7181430**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
o-Xylene	104.9	2.3	115.4		90.9	61.5	134	106.3	1.33	16.1	
Toluene	101.1	2.3	115.4		87.6	70.4	130	100.5	0.572	16.6	
Surr: 4-Bromofluorobenzene	105.4	0	115.4		91.4	70	128	109.1	0	0	

Sample ID: **1611H47-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/18/2016** Run No: **330346**
SampleType: **MSD** TestCode: **GASOLINE RANGE ORGANICS SW8015C** BatchID: **233346** Analysis Date: **11/18/2016** Seq No: **7181553**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	2.339	1.2	2.307		101	61.1	134	2.267	3.11	20	
Surr: a.a.a-trifluorotoluene	0.1472	0	0.1154		128	69.8	134	0.1465	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233364

Sample ID: **MB-233364** Client ID: Units: **mg/L** Prep Date: **11/21/2016** Run No: **330463**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010D** BatchID: **233364** Analysis Date: **11/21/2016** Seq No: **7185103**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Selenium	BRL	0.0200									
Silver	BRL	0.0100									

Sample ID: **LCS-233364** Client ID: Units: **mg/L** Prep Date: **11/21/2016** Run No: **330463**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233364** Analysis Date: **11/21/2016** Seq No: **7185104**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	1.020	0.0500	1.000		102	80	120				
Barium	0.9782	0.0200	1.000		97.8	80	120				
Cadmium	0.9788	0.0050	1.000		97.9	80	120				
Chromium	0.9889	0.0100	1.000		98.9	80	120				
Copper	0.9904	0.0100	1.000		99.0	80	120				
Lead	0.9875	0.0100	1.000		98.7	80	120				
Selenium	0.9926	0.0200	1.000		99.3	80	120				
Silver	0.09851	0.0100	0.1000		98.5	80	120				

Sample ID: **1611E54-002DMS** Client ID: Units: **mg/L** Prep Date: **11/21/2016** Run No: **330463**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233364** Analysis Date: **11/21/2016** Seq No: **7185108**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	1.014	0.0500	1.000		101	75	125				
Barium	1.004	0.0200	1.000	0.07975	92.4	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233364

Sample ID: **1611E54-002DMS** Client ID:
SampleType: **MS** TestCode: **METALS, TOTAL SW6010D**
Units: **mg/L** Prep Date: **11/21/2016** Run No: **330463**
BatchID: **233364** Analysis Date: **11/21/2016** Seq No: **7185108**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cadmium	0.9630	0.0050	1.000	0.003210	96.0	75	125				
Chromium	0.9462	0.0100	1.000	0.0006600	94.6	75	125				
Copper	1.006	0.0100	1.000	0.03402	97.2	75	125				
Lead	0.9373	0.0100	1.000		93.7	75	125				
Selenium	0.9859	0.0200	1.000		98.6	75	125				
Silver	0.09536	0.0100	0.1000		95.4	75	125				

Sample ID: **1611E54-002DMSD** Client ID:
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010D**
Units: **mg/L** Prep Date: **11/21/2016** Run No: **330463**
BatchID: **233364** Analysis Date: **11/21/2016** Seq No: **7185109**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	1.004	0.0500	1.000		100	75	125	1.014	1.05	20	
Barium	1.002	0.0200	1.000	0.07975	92.2	75	125	1.004	0.190	20	
Cadmium	0.9594	0.0050	1.000	0.003210	95.6	75	125	0.9630	0.381	20	
Chromium	0.9399	0.0100	1.000	0.0006600	93.9	75	125	0.9462	0.668	20	
Copper	1.005	0.0100	1.000	0.03402	97.1	75	125	1.006	0.128	20	
Lead	0.9265	0.0100	1.000		92.6	75	125	0.9373	1.16	20	
Selenium	0.9773	0.0200	1.000		97.7	75	125	0.9859	0.874	20	
Silver	0.09527	0.0100	0.1000		95.3	75	125	0.09536	0.094	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233378

Sample ID: **MB-233378**	Client ID:		Units: **ug/Kg**	Prep Date: **11/21/2016**	Run No: **330383**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233378**	Analysis Date: **11/21/2016**	Seq No: **7183629**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	100									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	10									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233378

Sample ID: **MB-233378**	Client ID:		Units: **ug/Kg**	Prep Date: **11/21/2016**	Run No: **330383**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233378**	Analysis Date: **11/21/2016**	Seq No: **7183629**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	20									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	10									
Surr: 4-Bromofluorobenzene	44.57	0	50.00		89.1	70	128				
Surr: Dibromofluoromethane	44.20	0	50.00		88.4	78.2	128				
Surr: Toluene-d8	44.42	0	50.00		88.8	76.5	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233378

Sample ID: **LCS-233378** Client ID: Units: **ug/Kg** Prep Date: **11/21/2016** Run No: **330383**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233378** Analysis Date: **11/21/2016** Seq No: **7183628**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	42.56	5.0	50.00		85.1	69.9	145				
Benzene	45.40	5.0	50.00		90.8	72.3	130				
Chlorobenzene	48.54	5.0	50.00		97.1	69	130				
Toluene	47.76	5.0	50.00		95.5	71.1	130				
Trichloroethene	50.99	5.0	50.00		102	71.7	136				
Surr: 4-Bromofluorobenzene	45.19	0	50.00		90.4	70	128				
Surr: Dibromofluoromethane	43.86	0	50.00		87.7	78.2	128				
Surr: Toluene-d8	45.21	0	50.00		90.4	76.5	116				

Sample ID: **1611I06-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **11/21/2016** Run No: **330383**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233378** Analysis Date: **11/21/2016** Seq No: **7183636**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	41.93	6.2	61.65		68.0	56.6	151				
Benzene	47.35	6.2	61.65		76.8	70.4	130				
Chlorobenzene	50.30	6.2	61.65		81.6	67.5	132				
Toluene	48.38	6.2	61.65		78.5	70.4	130				
Trichloroethene	51.22	6.2	61.65		83.1	70.1	137				
Surr: 4-Bromofluorobenzene	55.83	0	61.65		90.6	70	128				
Surr: Dibromofluoromethane	54.25	0	61.65		88.0	78.2	128				
Surr: Toluene-d8	55.15	0	61.65		89.5	76.5	116				

Sample ID: **1611I06-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **11/21/2016** Run No: **330383**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233378** Analysis Date: **11/21/2016** Seq No: **7183637**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	43.45	6.2	61.65		70.5	56.6	151	41.93	3.55	20.4	
Benzene	46.42	6.2	61.65		75.3	70.4	130	47.35	1.97	16.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233378

Sample ID: **1611I06-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/Kg-dry** Prep Date: **11/21/2016** Run No: **330383**
BatchID: **233378** Analysis Date: **11/21/2016** Seq No: **7183637**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	49.82	6.2	61.65		80.8	67.5	132	50.30	0.960	14.6	
Toluene	47.91	6.2	61.65		77.7	70.4	130	48.38	0.973	16.6	
Trichloroethene	50.28	6.2	61.65		81.6	70.1	137	51.22	1.85	17	
Surr: 4-Bromofluorobenzene	55.64	0	61.65		90.3	70	128	55.83	0	0	
Surr: Dibromofluoromethane	54.68	0	61.65		88.7	78.2	128	54.25	0	0	
Surr: Toluene-d8	55.11	0	61.65		89.4	76.5	116	55.15	0	0	

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233460

Sample ID: **MB-233460**	Client ID:				Units: **mg/Kg**		Prep Date: **11/22/2016**		Run No: **330490**	
SampleType: **MBLK**	TestCode: **TOTAL MERCURY SW7471B**				BatchID: **233460**		Analysis Date: **11/22/2016**		Seq No: **7185558**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-233460**	Client ID:				Units: **mg/Kg**		Prep Date: **11/22/2016**		Run No: **330490**	
SampleType: **LCS**	TestCode: **TOTAL MERCURY SW7471B**				BatchID: **233460**		Analysis Date: **11/22/2016**		Seq No: **7185559**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3937	0.100	0.4000		98.4	80	120				

Sample ID: **1611F67-001CMS**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **11/22/2016**		Run No: **330490**	
SampleType: **MS**	TestCode: **TOTAL MERCURY SW7471B**				BatchID: **233460**		Analysis Date: **11/22/2016**		Seq No: **7185561**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4215	0.104	0.4162	0.02190	96.0	70	130				

Sample ID: **1611F67-001CMSD**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **11/22/2016**		Run No: **330490**	
SampleType: **MSD**	TestCode: **TOTAL MERCURY SW7471B**				BatchID: **233460**		Analysis Date: **11/22/2016**		Seq No: **7185562**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4044	0.103	0.4125	0.02190	92.7	70	130	0.4215	4.14	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233581

Sample ID: **MB-233581**	Client ID:		Units: **ug/L**	Prep Date: **11/22/2016**	Run No: **330502**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233581**	Analysis Date: **11/22/2016**	Seq No: **7185977**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233581

Sample ID: **MB-233581** Client ID: Units: **ug/L** Prep Date: **11/22/2016** Run No: **330502**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233581** Analysis Date: **11/22/2016** Seq No: **7185977**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	39.66	0	50.00		79.3	66.1	129				
Surr: Dibromofluoromethane	47.77	0	50.00		95.5	83.6	123				
Surr: Toluene-d8	48.83	0	50.00		97.7	81.8	118				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233581

Sample ID: **LCS-233581** Client ID: Units: **ug/L** Prep Date: **11/22/2016** Run No: **330502**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233581** Analysis Date: **11/22/2016** Seq No: **7185972**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	51.20	5.0	50.00		102	68	139				
Benzene	53.85	5.0	50.00		108	74	125				
Chlorobenzene	48.16	5.0	50.00		96.3	75.7	123				
Toluene	54.27	5.0	50.00		109	75.9	126				
Trichloroethene	52.91	5.0	50.00		106	70.6	129				
Surr: 4-Bromofluorobenzene	40.29	0	50.00		80.6	66.1	129				
Surr: Dibromofluoromethane	47.48	0	50.00		95.0	83.6	123				
Surr: Toluene-d8	45.22	0	50.00		90.4	81.8	118				

Sample ID: **1611F49-004AMS** Client ID: **GW-21** Units: **ug/L** Prep Date: **11/22/2016** Run No: **330549**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233581** Analysis Date: **11/22/2016** Seq No: **7187624**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	396.0	50	500.0		79.2	64.3	149				
Benzene	403.3	50	500.0		80.7	71.6	132				
Chlorobenzene	407.4	50	500.0		81.5	73.1	126				
Toluene	411.1	50	500.0		82.2	72.5	135				
Trichloroethene	389.1	50	500.0		77.8	70.2	132				
Surr: 4-Bromofluorobenzene	421.8	0	500.0		84.4	66.1	129				
Surr: Dibromofluoromethane	479.2	0	500.0		95.8	83.6	123				
Surr: Toluene-d8	429.5	0	500.0		85.9	81.8	118				

Sample ID: **1611F49-004AMSD** Client ID: **GW-21** Units: **ug/L** Prep Date: **11/22/2016** Run No: **330549**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233581** Analysis Date: **11/22/2016** Seq No: **7187626**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	355.2	50	500.0		71.0	64.3	149	396.0	10.9	30.8	
Benzene	395.0	50	500.0		79.0	71.6	132	403.3	2.08	20.7	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233581

Sample ID: **1611F49-004AMSD** Client ID: **GW-21** Units: **ug/L** Prep Date: **11/22/2016** Run No: **330549**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233581** Analysis Date: **11/22/2016** Seq No: **7187626**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	392.2	50	500.0		78.4	73.1	126	407.4	3.80	26.6	
Toluene	396.8	50	500.0		79.4	72.5	135	411.1	3.54	23.2	
Trichloroethene	390.1	50	500.0		78.0	70.2	132	389.1	0.257	27.7	
Surr: 4-Bromofluorobenzene	407.4	0	500.0		81.5	66.1	129	421.8	0	0	
Surr: Dibromofluoromethane	466.1	0	500.0		93.2	83.6	123	479.2	0	0	
Surr: Toluene-d8	449.8	0	500.0		90.0	81.8	118	429.5	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233747

Sample ID: **MB-233747**	Client ID:				Units: **ug/L**		Prep Date: **11/27/2016**		Run No: **330816**
SampleType: **MBLK**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233747**		Analysis Date: **11/27/2016**		Seq No: **7195583**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
m,p-Xylene	BRL	1.0									
o-Xylene	BRL	1.0									
Toluene	BRL	1.0									
Surr: 4-Bromofluorobenzene	44.91	0	50.00		89.8	66.1	129				

Sample ID: **MB-233747**	Client ID:				Units: **mg/L**		Prep Date: **11/27/2016**		Run No: **330817**
SampleType: **MBLK**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233747**		Analysis Date: **11/27/2016**		Seq No: **7195640**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	BRL	0.50									
Surr: a.a.a-trifluorotoluene	0.05352	0	0.0500		107	75.1	120				

Sample ID: **LCS-233747**	Client ID:				Units: **mg/L**		Prep Date: **11/27/2016**		Run No: **330817**
SampleType: **LCS**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233747**		Analysis Date: **11/27/2016**		Seq No: **7195639**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	0.7705	0.50	1.000		77.0	69.9	126				
Surr: a.a.a-trifluorotoluene	0.05396	0	0.0500		108	75.1	120				

Sample ID: **LCS-233747**	Client ID:				Units: **ug/L**		Prep Date: **11/27/2016**		Run No: **330792**
SampleType: **LCS**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233747**		Analysis Date: **11/28/2016**		Seq No: **7196225**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	53.75	1.0	50.00		108	74	125				
Ethylbenzene	55.70	1.0	50.00		111	80.9	121				
m,p-Xylene	109.2	1.0	100.0		109	80.3	126				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233747

Sample ID: **LCS-233747**	Client ID:			Units: **ug/L**	Prep Date: **11/27/2016**	Run No: **330792**
SampleType: **LCS**	TestCode: **VOLATILE ORGANICS SW8260B**			BatchID: **233747**	Analysis Date: **11/28/2016**	Seq No: **7196225**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
o-Xylene	53.54	1.0	50.00		107	76.9	129				
Toluene	53.94	1.0	50.00		108	75.9	126				
Surr: 4-Bromofluorobenzene	50.61	0	50.00		101	66.1	129				

Sample ID: **1611K43-001AMS**	Client ID:			Units: **ug/L**	Prep Date: **11/27/2016**	Run No: **330816**
SampleType: **MS**	TestCode: **VOLATILE ORGANICS SW8260B**			BatchID: **233747**	Analysis Date: **11/27/2016**	Seq No: **7195587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	55.12	1.0	50.00		110	71.6	132				
Ethylbenzene	53.31	1.0	50.00		107	81.2	130				
m,p-Xylene	105.9	1.0	100.0		106	76	139				
o-Xylene	55.83	1.0	50.00		112	76.8	137				
Toluene	47.08	1.0	50.00		94.2	72.5	135				
Surr: 4-Bromofluorobenzene	52.81	0	50.00		106	66.1	129				

Sample ID: **1611K43-001AMS**	Client ID:			Units: **mg/L**	Prep Date: **11/27/2016**	Run No: **330817**
SampleType: **MS**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**			BatchID: **233747**	Analysis Date: **11/27/2016**	Seq No: **7195642**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	0.8282	0.50	1.000		82.8	65.8	133				
Surr: a.a.a-trifluorotoluene	0.05280	0	0.0500		106	75.1	120				

Sample ID: **1611K43-001AMSD**	Client ID:			Units: **ug/L**	Prep Date: **11/27/2016**	Run No: **330816**
SampleType: **MSD**	TestCode: **VOLATILE ORGANICS SW8260B**			BatchID: **233747**	Analysis Date: **11/27/2016**	Seq No: **7195590**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	55.62	1.0	50.00		111	71.6	132	55.12	0.903	20.7	
Ethylbenzene	53.13	1.0	50.00		106	81.2	130	53.31	0.338	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611F49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233747

Sample ID: **1611K43-001AMSD**	Client ID:			Units: **ug/L**	Prep Date: **11/27/2016**	Run No: **330816**
SampleType: **MSD**	TestCode: **VOLATILE ORGANICS SW8260B**			BatchID: **233747**	Analysis Date: **11/27/2016**	Seq No: **7195590**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	105.8	1.0	100.0		106	76	139	105.9	0.066	20	
o-Xylene	54.88	1.0	50.00		110	76.8	137	55.83	1.72	20	
Toluene	46.88	1.0	50.00		93.8	72.5	135	47.08	0.426	23.2	
Surr: 4-Bromofluorobenzene	53.24	0	50.00		106	66.1	129	52.81	0	0	

Sample ID: **1611K43-001AMSD**	Client ID:			Units: **mg/L**	Prep Date: **11/27/2016**	Run No: **330817**
SampleType: **MSD**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**			BatchID: **233747**	Analysis Date: **11/27/2016**	Seq No: **7195643**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	0.8517	0.50	1.000		85.2	65.8	133	0.8282	2.81	20	
Surr: a.a.a-trifluorotoluene	0.05364	0	0.0500		107	75.1	120	0.05280	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 19, 2016

Stephen Wilson
Resolute Env. & Water Resources Consulting, LLC
1001 Weatherstone Pkwy
Woodstock GA 30188

TEL: (678) 232-9499
FAX: (888) 881-8219

RE: Plant Kraft Phase II

Dear Stephen Wilson: Order No: 1612B20

Analytical Environmental Services, Inc. received 4 samples on 12/12/2016 8:59:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

CHAIN OF CUSTODY

Work Order: 1612B20

Date: 12/9/16 Page 1 of 1

COMPANY: Resolute Environmental

ADDRESS: 1001 Weatherstone Parkway Woodstock GA 30188

PHONE: 770-296-9648

FAX:

SAMPLED BY: Forrest Howard

SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	DRO	No # of Containers	REMARKS
1	SB-8-N	12/9/16	1540	X		SO	X		
2	SB-8-E	12/9/16	1545	X		SO	X		
3	SB-8-S	12/9/16	1550	X		SO	X		
4	SB-8-W	12/9/16	1555	X		SO	X		
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED

PRESERVATION (See codes)

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY: DATE/TIME:

1: 12/12/16 0859

2:

3:

RECEIVED BY: DATE/TIME:

1: Benita Omeara 12/12/16 8:59

2:

3:

SPECIAL INSTRUCTIONS/COMMENTS:

stephen.wilkerson@resolute-env.com
trent.godwin@resolute-env.com
~~Hamilton@Resolute~~ FH
llmillet@southernco.com

SHIPMENT METHOD:

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER

PROJECT INFORMATION

PROJECT NAME: Plant kraft Phase 2

PROJECT #:

SITE ADDRESS:

SEND REPORT TO: Email in special Instructions

INVOICE TO:
(IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers

Turnaround Time Request

- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other

STATE PROGRAM (if any):

E-mail? Fax?

DATA PACKAGE: I ○ II ○ III ○ IV ○

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 19-Dec-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-8-N
Project Name:	Plant Kraft Phase II	**Collection Date:**	12/9/2016 3:40:00 PM
Lab ID:	1612B20-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
DIESEL RANGE ORGANICS SW8015C (SW3550C)								
TPH (Diesel Range Organics)	19	11		mg/Kg-dry	234837	1	12/15/2016 13:47	RF
Surr: Dioctylphthalate	82.3	50.1-122		%REC	234837	1	12/15/2016 13:47	RF
PERCENT MOISTURE D2216								
Percent Moisture	37.8	0		wt%	R332358	1	12/16/2016 10:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Dec-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-8-E
Project Name:	Plant Kraft Phase II	**Collection Date:**	12/9/2016 3:45:00 PM
Lab ID:	1612B20-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
DIESEL RANGE ORGANICS SW8015C (SW3550C)								
TPH (Diesel Range Organics)	50	11		mg/Kg-dry	234837	1	12/15/2016 14:10	RF
Surr: Dioctylphthalate	86.6	50.1-122		%REC	234837	1	12/15/2016 14:10	RF
PERCENT MOISTURE D2216								
Percent Moisture	37.2	0		wt%	R332358	1	12/16/2016 10:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Dec-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-8-S
Project Name:	Plant Kraft Phase II	**Collection Date:**	12/9/2016 3:50:00 PM
Lab ID:	1612B20-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
DIESEL RANGE ORGANICS SW8015C (SW3550C)								
TPH (Diesel Range Organics)	1300	75		mg/Kg-dry	234837	10	12/15/2016 15:19	RF
Surr: Dioctylphthalate	87.5	50.1-122		%REC	234837	1	12/15/2016 14:57	RF
PERCENT MOISTURE D2216								
Percent Moisture	11.2	0		wt%	R332358	1	12/16/2016 10:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Dec-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-8-W
Project Name:	Plant Kraft Phase II	**Collection Date:**	12/9/2016 3:55:00 PM
Lab ID:	1612B20-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
DIESEL RANGE ORGANICS SW8015C (SW3550C)								
TPH (Diesel Range Organics)	230	7.5		mg/Kg-dry	234837	1	12/15/2016 14:33	RF
Surr: Dioctylphthalate	85.2	50.1-122		%REC	234837	1	12/15/2016 14:33	RF
PERCENT MOISTURE D2216								
Percent Moisture	10.3	0		wt%	R332358	1	12/16/2016 10:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Resolute Work Order Number 1612B23

Checklist completed by [signature] 12/12/16
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.9° Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Plant Kraft Phase II
Workorder: 1612B20

ANALYTICAL QC SUMMARY REPORT

BatchID: 234837

Sample ID: **MB-234837** Client ID: Units: **mg/Kg** Prep Date: **12/14/2016** Run No: **332195**
SampleType: **MBLK** TestCode: **DIESEL RANGE ORGANICS SW8015C** BatchID: **234837** Analysis Date: **12/14/2016** Seq No: **7234412**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.672	0	3.300		81.0	50.1	122				

Sample ID: **LCS-234837** Client ID: Units: **mg/Kg** Prep Date: **12/14/2016** Run No: **332195**
SampleType: **LCS** TestCode: **DIESEL RANGE ORGANICS SW8015C** BatchID: **234837** Analysis Date: **12/14/2016** Seq No: **7234413**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	28.91	6.7	33.30	1.281	83.0	56.4	119				
Surr: Dioctylphthalate	2.669	0	3.330		80.1	50.1	122				

Sample ID: **1612B20-002AMS** Client ID: **SB-8-E** Units: **mg/Kg-dry** Prep Date: **12/14/2016** Run No: **332293**
SampleType: **MS** TestCode: **DIESEL RANGE ORGANICS SW8015C** BatchID: **234837** Analysis Date: **12/16/2016** Seq No: **7242698**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	86.95	11	52.98	49.84	70.0	40.6	122				
Surr: Dioctylphthalate	4.492	0	5.298		84.8	54.5	121				

Sample ID: **1612B20-002AMSD** Client ID: **SB-8-E** Units: **mg/Kg-dry** Prep Date: **12/14/2016** Run No: **332293**
SampleType: **MSD** TestCode: **DIESEL RANGE ORGANICS SW8015C** BatchID: **234837** Analysis Date: **12/16/2016** Seq No: **7242699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	91.30	11	52.98	49.84	78.3	40.6	122	86.95	4.88	29.9	
Surr: Dioctylphthalate	4.137	0	5.298		78.1	54.5	121	4.492	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 14, 2016

Stephen Wilson
Resolute Env. & Water Resources Consulting, LLC
1001 Weatherstone Pkwy
Woodstock GA 30188

TEL: (678) 232-9499
FAX: (888) 881-8219

RE: Plant Kraft Phase 2

Dear Stephen Wilson: Order No: 1612B62

Analytical Environmental Services, Inc. received 2 samples on 12/12/2016 8:59:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

CHAIN OF CUSTODY

12/12/16 Work Order: ~~1612B62~~ 1612B62

Date: 12/10/16 Page 1 of 1

COMPANY: Resolute Environmental

ADDRESS: 1001 weatherstone pkwy 30188

PHONE: 770-296-9648

FAX:

SAMPLED BY: Forrest Howard

SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Lead only EPA 6010	REMARKS	No # of Containers
1	SB-36-14	12/9/16	1135	X			X		
2	SB-18	12/10/16	1151	X			X		
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

ANALYSIS REQUESTED

PRESERVATION (See codes)

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY: DATE/TIME:

1: 12/12/16 0859

2:

3:

RECEIVED BY: DATE/TIME:

1: Dorita Onerair 12/12/16 8:59

2:

3:

PROJECT INFORMATION

PROJECT NAME: Plant Kraft phase 2

PROJECT #:

SITE ADDRESS:

SEND REPORT TO: Emails in comments Box

INVOICE TO:
(IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers

Turnaround Time Request

- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush **(auth req.)**
- [ ] Other

STATE PROGRAM (if any):

E-mail? Fax?

DATA PACKAGE: I ○ II ○ III ○ IV ○

SPECIAL INSTRUCTIONS/COMMENTS:
Email Report To:
Stephen.Wilson@Resolute-env.com
Trent.Godwin@Resolute-env.com
llmillet@southernco.com

SHIPMENT METHOD:

OUT / /

IN / /

VIA:

VIA:

CLIENT FedEx UPS MAIL COURIER

GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: Resolute Env. & Water Resources Consulting, LLC
Project: Plant Kraft Phase 2
Lab ID: 1612B62

Case Narrative

Sample Receiving Non-conformance:

Turnaround time was adjusted from standard 5 day to next day per client request.

Analytical Environmental Services, Inc **Date:** 14-Dec-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-36-14
Project Name:	Plant Kraft Phase 2	**Collection Date:**	12/9/2016 11:35:00 AM
Lab ID:	1612B62-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D					**(SW3010A)**			
Lead	BRL	0.0100		mg/L	234677	1	12/13/2016 16:19	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 14-Dec-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-18
Project Name:	Plant Kraft Phase 2	**Collection Date:**	12/10/2016 11:51:00 AM
Lab ID:	1612B62-002	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D (SW3010A)								
Lead	BRL	0.0100		mg/L	234677	1	12/13/2016 13:33	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Resolute Work Order Number 1612B62

Checklist completed by PDS Masoud 12/12/16
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.9° Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by PM

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Plant Kraft Phase 2
Workorder: 1612B62

ANALYTICAL QC SUMMARY REPORT

BatchID: 234677

Sample ID: **MB-234677**	Client ID:			Units: **mg/L**	Prep Date: **12/12/2016**	Run No: **331978**
SampleType: **MBLK**	TestCode: **METALS, TOTAL** **SW6010D**			BatchID: **234677**	Analysis Date: **12/13/2016**	Seq No: **7228889**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	BRL	0.0100									

Sample ID: **LCS-234677**	Client ID:			Units: **mg/L**	Prep Date: **12/12/2016**	Run No: **331978**
SampleType: **LCS**	TestCode: **METALS, TOTAL** **SW6010D**			BatchID: **234677**	Analysis Date: **12/13/2016**	Seq No: **7228890**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	1.023	0.0100	1.000		102	80	120				

Sample ID: **1612B62-001AMS**	Client ID: **SB-36-14**			Units: **mg/L**	Prep Date: **12/12/2016**	Run No: **331978**
SampleType: **MS**	TestCode: **METALS, TOTAL** **SW6010D**			BatchID: **234677**	Analysis Date: **12/13/2016**	Seq No: **7228892**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	0.9143	0.0100	1.000	0.01028	90.4	75	125				

Sample ID: **1612B62-001AMSD**	Client ID: **SB-36-14**			Units: **mg/L**	Prep Date: **12/12/2016**	Run No: **331978**
SampleType: **MSD**	TestCode: **METALS, TOTAL** **SW6010D**			BatchID: **234677**	Analysis Date: **12/13/2016**	Seq No: **7228893**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	0.9067	0.0100	1.000	0.01028	89.6	75	125	0.9143	0.831	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 13, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Troutman Sanders Plant Kraft

Dear Leah Millet: Order No: 1702379

Analytical Environmental Services, Inc. received 4 samples on 2/6/2017 8:13:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1702379

Date: _____ Page 1 of _____

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd Atlanta, GA 30308
PHONE: 678.732.9499	FAX: -
SAMPLED BY: Michael Putinkin (Resolute) Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	DRO EPA 8015	PRESERVATION (See codes) NA	REMARKS	No # of Containers
1	SB-8-S-25	02/01/17	0835	X		SO	X			
2	SB-8-S-50	02/01/17	0940	X		SO	X			
3	SB-8-W-25	02/01/17	0945	X		SO	X			
4	SB-8-W-50	02/01/17	0949	X		SO	X			
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

ANALYSIS REQUESTED

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1:	2/6/17 0813	1:	2/6/17 813
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD:
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: Trentmen Sunchers Plant Kraft
PROJECT #: EA AST site investigations
SITE ADDRESS: 155 Crossgate Rd Port Wentworth, GA
SEND REPORT TO: Stephen.Wilsen@resolute-env.com
INVOICE TO: Michael.Putinkin@resolute-env.com
(IF DIFFERENT FROM ABOVE)
Lea Millet (Georgia Power)
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers

Turnaround Time Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other _____

STATE PROGRAM (if any): HSRA
E-mail? Fax?
DATA PACKAGE: I ○ II ○ III ✓ IV ○

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 10-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-8-S-25
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 9:35:00 AM
Lab ID:	1702379-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
DIESEL RANGE ORGANICS SW8015C (SW3550C)								
TPH (Diesel Range Organics)	300	89		mg/Kg-dry	237559	10	02/09/2017 15:39	RS
Surr: Dioctylphthalate	87.4	54.5-121		%REC	237559	10	02/09/2017 15:39	RS
PERCENT MOISTURE D2216								
Percent Moisture	24.6	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-8-S-50
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 9:40:00 AM
Lab ID:	1702379-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
DIESEL RANGE ORGANICS SW8015C (SW3550C)								
TPH (Diesel Range Organics)	26	10		mg/Kg-dry	237559	1	02/10/2017 09:31	RS
Surr: Dioctylphthalate	88.5	54.5-121		%REC	237559	1	02/10/2017 09:31	RS
PERCENT MOISTURE D2216								
Percent Moisture	32.8	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-8-W-25
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 9:45:00 AM
Lab ID:	1702379-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
DIESEL RANGE ORGANICS SW8015C (SW3550C)								
TPH (Diesel Range Organics)	36	10		mg/Kg-dry	237559	1	02/10/2017 07:52	RS
Surr: Dioctylphthalate	82.8	54.5-121		%REC	237559	1	02/10/2017 07:52	RS
PERCENT MOISTURE D2216								
Percent Moisture	34.5	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-8-W-50
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 9:49:00 AM
Lab ID:	1702379-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
DIESEL RANGE ORGANICS SW8015C (SW3550C)								
TPH (Diesel Range Organics)	BRL	8.9		mg/Kg-dry	237559	1	02/09/2017 23:42	RS
Surr: Dioctylphthalate	77.2	54.5-121		%REC	237559	1	02/09/2017 23:42	RS
PERCENT MOISTURE D2216								
Percent Moisture	24.4	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Troutman Sanders Plant Kraft
Workorder: 1702379

ANALYTICAL QC SUMMARY REPORT

BatchID: 237559

Sample ID: **MB-237559**	Client ID:				Units: **mg/Kg**		Prep Date: **02/08/2017**		Run No: **336039**	
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **237559**		Analysis Date: **02/09/2017**		Seq No: **7337386**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.641	0	3.300		80.0	54.5	121				

Sample ID: **LCS-237559**	Client ID:				Units: **mg/Kg**		Prep Date: **02/08/2017**		Run No: **336039**	
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **237559**		Analysis Date: **02/09/2017**		Seq No: **7337387**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	27.35	6.7	33.30	2.138	75.7	54.6	120				
Surr: Dioctylphthalate	2.617	0	3.330		78.6	54.5	121				

Sample ID: **1702334-004BMS**	Client ID: **B1-03-D**				Units: **mg/Kg-dry**		Prep Date: **02/08/2017**		Run No: **336039**	
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **237559**		Analysis Date: **02/09/2017**		Seq No: **7337393**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	491.6	76	37.84	912.1	-1110	40.6	122				S
Surr: Dioctylphthalate	1.905	0	3.784		50.3	54.5	121				S

Sample ID: **1702334-004BMSD**	Client ID: **B1-03-D**				Units: **mg/Kg-dry**		Prep Date: **02/08/2017**		Run No: **336039**	
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **237559**		Analysis Date: **02/09/2017**		Seq No: **7337394**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	630.5	76	37.84	912.1	-744	40.6	122	491.6	24.8	29.9	S
Surr: Dioctylphthalate	2.315	0	3.784		61.2	54.5	121	1.905	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 13, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Troutman Sanders Plant Kraft

Dear Leah Millet: Order No: 1702380

Analytical Environmental Services, Inc. received 10 samples on 2/6/2017 8:13:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

CHAIN OF CUSTODY

PLANT KRAFT
1702380 Work Order: BURIED CCR

Date: 01-FEB-17 Page 1 of ____

COMPANY:	ADDRESS:
GEORGIA POWER COMPANY	241 RALPH MCGILL BLVD ATLANTA, GA 30308
PHONE: 678.232.9499	FAX: —
SAMPLED BY: MICHAEL PATINKIN (AECOM) FORREST HOWARD	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) NA	Metals (HSRALish) (See Attached)	REMARKS	No # of Containers
1	SB-50-2-4-5	02/01/17	1030	X		SO	X		COOLER	1
2	SB-50-4-2-3	02/01/17	1111	X		SO	X			
3	SB-51-7B-2-3.2	02/01/17	1330	X		SO	X			
4	SB-50-3-0.5-1.1	02/01/17	1057	X		SO	X			
5	SB-37-11B-0-4	02/01/17	1130	(FD)	X	SO	X			
6	SB-51-2B-1.4-1.9	02/01/17	1420	X		SO	X			
7	SB-15-3B-0-4	02/01/17	1400	(FD)	X	SO	X			
8	KMW-6B-1.6-2.2	02/01/17	1456	X		SO	X			
9	KMW-7B-0-4	02/01/17	1500	(FD)	X	SO	X			
10	SB-44-7B-0.6-1.6	02/01/17	1620	X		SO	X			
11										
12										
13										
14										

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1: MICHAEL PATINKIN	2/2/17 1100	1: Forrest Howard	2/2/17 1100
2:	2/6/17 0813	2:	2/6/17 813
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD:
OUT / / VIA:
IN / / VIA:
@ (CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: TROUT MAN SANDERS PLANT KRAFT
PROJECT #: BURIED CCR INVESTIGATION
SITE ADDRESS: 165 CROSSGATE ROAD PORT WENTWORTH, GA
SEND REPORT TO: STEPHEN.WILSON@RESOLUTE-ENV.COM
INVOICE TO: MICHAEL.PATINKIN@RESOLUTE-ENV.COM
(IF DIFFERENT FROM ABOVE) LEA MILLET (GEORGIA POWER)
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers

Turnaround Time Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other _____

STATE PROGRAM (if any): HSRA
E-mail? Fax?
DATA PACKAGE: I ○ II ○ III ◉ IV ○

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-50-2-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 10:30:00 AM
Lab ID:	1702380-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	0.236	0.144		mg/Kg-dry	237499	1	02/07/2017 14:27	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	BRL	8.35		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Arsenic	111	8.35		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Barium	1400	83.5		mg/Kg-dry	237732	10	02/10/2017 20:53	IO
Beryllium	4.72	4.17		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Cadmium	BRL	4.17		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Chromium	20.0	4.17		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Copper	76.3	4.17		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Lead	12.4	8.35		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Nickel	27.9	8.35		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Selenium	11.0	8.35		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Silver	BRL	4.17		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Thallium	BRL	8.35		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
Zinc	24.0	8.35		mg/Kg-dry	237732	1	02/10/2017 17:07	IO
PERCENT MOISTURE D2216								
Percent Moisture	40.6	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-50-4-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 11:11:00 AM
Lab ID:	1702380-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.146		mg/Kg-dry	237499	1	02/07/2017 14:29	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	BRL	7.89		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Arsenic	88.7	7.89		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Barium	711	7.89		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Beryllium	5.11	3.94		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Cadmium	BRL	3.94		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Chromium	28.4	3.94		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Copper	70.4	3.94		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Lead	17.7	7.89		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Nickel	27.1	7.89		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Selenium	BRL	7.89		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Silver	BRL	3.94		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Thallium	BRL	7.89		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
Zinc	24.5	7.89		mg/Kg-dry	237732	1	02/10/2017 17:11	IO
PERCENT MOISTURE D2216								
Percent Moisture	37.1	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-51-7B-2-3.2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 1:30:00 PM
Lab ID:	1702380-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	0.160	0.134		mg/Kg-dry	237499	1	02/07/2017 14:31	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	BRL	7.20		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Arsenic	74.3	7.20		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Barium	613	7.20		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Beryllium	BRL	3.60		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Cadmium	BRL	3.60		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Chromium	18.2	3.60		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Copper	48.8	3.60		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Lead	11.0	7.20		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Nickel	22.7	7.20		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Selenium	BRL	7.20		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Silver	BRL	3.60		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Thallium	BRL	7.20		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
Zinc	17.1	7.20		mg/Kg-dry	237732	1	02/10/2017 17:15	IO
PERCENT MOISTURE D2216								
Percent Moisture	36.3	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-50-3-0.5-1.1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 10:57:00 AM
Lab ID:	1702380-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.150		mg/Kg-dry	237499	1	02/07/2017 14:33	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	BRL	7.34		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Arsenic	56.2	7.34		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Barium	411	7.34		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Beryllium	BRL	3.67		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Cadmium	BRL	3.67		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Chromium	18.1	3.67		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Copper	40.6	3.67		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Lead	12.2	7.34		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Nickel	22.3	7.34		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Selenium	BRL	7.34		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Silver	BRL	3.67		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Thallium	BRL	7.34		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
Zinc	30.5	7.34		mg/Kg-dry	237732	1	02/10/2017 19:50	IO
PERCENT MOISTURE D2216								
Percent Moisture	33.6	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-37-11B-0-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 11:30:00 AM
Lab ID:	1702380-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	0.164	0.125		mg/Kg-dry	237499	1	02/07/2017 14:35	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	BRL	5.92		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Arsenic	19.4	5.92		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Barium	103	5.92		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Beryllium	BRL	2.96		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Cadmium	BRL	2.96		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Chromium	10.1	2.96		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Copper	22.6	2.96		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Lead	50.9	5.92		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Nickel	19.8	5.92		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Selenium	BRL	5.92		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Silver	BRL	2.96		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Thallium	BRL	5.92		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
Zinc	527	5.92		mg/Kg-dry	237732	1	02/10/2017 19:54	IO
PERCENT MOISTURE D2216								
Percent Moisture	22.3	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-51-2B-1.4-1.9
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 2:20:00 PM
Lab ID:	1702380-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.109		mg/Kg-dry	237499	1	02/07/2017 14:38	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	BRL	5.89		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Arsenic	39.3	5.89		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Barium	315	5.89		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Beryllium	BRL	2.95		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Cadmium	BRL	2.95		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Chromium	12.9	2.95		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Copper	29.9	2.95		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Lead	9.07	5.89		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Nickel	15.4	5.89		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Selenium	BRL	5.89		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Silver	BRL	2.95		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Thallium	BRL	5.89		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
Zinc	17.1	5.89		mg/Kg-dry	237732	1	02/10/2017 19:58	IO
PERCENT MOISTURE D2216								
Percent Moisture	19.0	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-15-3B-0-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 2:00:00 PM
Lab ID:	1702380-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.110		mg/Kg-dry	237499	1	02/07/2017 14:11	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	BRL	5.73		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Arsenic	BRL	5.73		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Barium	42.3	5.73		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Beryllium	BRL	2.86		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Cadmium	BRL	2.86		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Chromium	5.30	2.86		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Copper	5.08	2.86		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Lead	12.4	5.73		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Nickel	11.4	5.73		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Selenium	BRL	5.73		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Silver	BRL	2.86		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Thallium	BRL	5.73		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
Zinc	20.7	5.73		mg/Kg-dry	237732	1	02/10/2017 20:02	IO
PERCENT MOISTURE D2216								
Percent Moisture	13.5	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	KMW-6B-1.6-2.2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 2:50:00 PM
Lab ID:	1702380-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.124		mg/Kg-dry	237499	1	02/07/2017 14:40	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	BRL	5.93		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Arsenic	89.9	5.93		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Barium	223	5.93		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Beryllium	BRL	2.97		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Cadmium	BRL	2.97		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Chromium	13.4	2.97		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Copper	28.6	2.97		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Lead	16.0	5.93		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Nickel	14.7	5.93		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Selenium	BRL	5.93		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Silver	BRL	2.97		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Thallium	BRL	5.93		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
Zinc	19.3	5.93		mg/Kg-dry	237732	1	02/10/2017 20:09	IO
PERCENT MOISTURE D2216								
Percent Moisture	22.2	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	KMW-7B-0-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 3:00:00 PM
Lab ID:	1702380-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.0972		mg/Kg-dry	237499	1	02/07/2017 14:42	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	BRL	5.16		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Arsenic	13.7	5.16		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Barium	92.9	5.16		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Beryllium	BRL	2.58		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Cadmium	BRL	2.58		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Chromium	7.87	2.58		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Copper	13.5	2.58		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Lead	10.6	5.16		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Nickel	9.55	5.16		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Selenium	BRL	5.16		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Silver	BRL	2.58		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Thallium	BRL	5.16		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
Zinc	19.9	5.16		mg/Kg-dry	237732	1	02/10/2017 20:13	IO
PERCENT MOISTURE D2216								
Percent Moisture	10.8	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-17

Client:	Georgia Power Company	**Client Sample ID:**	SB-44-7B-0.6-1.6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	2/1/2017 4:20:00 PM
Lab ID:	1702380-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	1.02	0.141		mg/Kg-dry	237499	1	02/07/2017 14:44	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Antimony	69.2	6.96		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Arsenic	55.7	6.96		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Barium	224	6.96		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Beryllium	BRL	3.48		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Cadmium	BRL	3.48		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Chromium	84.3	3.48		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Copper	78.7	3.48		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Lead	34.2	6.96		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Nickel	5690	139		mg/Kg-dry	237732	20	02/13/2017 13:08	IO
Selenium	BRL	6.96		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Silver	BRL	3.48		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Thallium	62.8	6.96		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
Zinc	24.4	6.96		mg/Kg-dry	237732	1	02/10/2017 20:17	IO
PERCENT MOISTURE D2216								
Percent Moisture	29.8	0		wt%	R336214	1	02/10/2017 09:00	BD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Troutman Sanders Plant Kraft
Workorder: 1702380

ANALYTICAL QC SUMMARY REPORT

BatchID: 237499

Sample ID: **MB-237499**	Client ID:				Units: **mg/Kg**		Prep Date: **02/07/2017**		Run No: **335898**
SampleType: **MBLK**	TestCode: **TOTAL MERCURY SW7471B**				BatchID: **237499**		Analysis Date: **02/07/2017**		Seq No: **7331648**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-237499**	Client ID:				Units: **mg/Kg**		Prep Date: **02/07/2017**		Run No: **335898**
SampleType: **LCS**	TestCode: **TOTAL MERCURY SW7471B**				BatchID: **237499**		Analysis Date: **02/07/2017**		Seq No: **7331649**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4421	0.100	0.4000		111	80	120				

Sample ID: **1702380-007AMS**	Client ID: **SB-15-3B-0-4**				Units: **mg/Kg-dry**		Prep Date: **02/07/2017**		Run No: **335898**
SampleType: **MS**	TestCode: **TOTAL MERCURY SW7471B**				BatchID: **237499**		Analysis Date: **02/07/2017**		Seq No: **7331651**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.5161	0.109	0.4348		119	70	130				

Sample ID: **1702380-007AMSD**	Client ID: **SB-15-3B-0-4**				Units: **mg/Kg-dry**		Prep Date: **02/07/2017**		Run No: **335898**
SampleType: **MSD**	TestCode: **TOTAL MERCURY SW7471B**				BatchID: **237499**		Analysis Date: **02/07/2017**		Seq No: **7331652**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.5599	0.111	0.4440		126	70	130	0.5161	8.13	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Troutman Sanders Plant Kraft
Workorder: 1702380

ANALYTICAL QC SUMMARY REPORT

BatchID: 237732

Sample ID: **MB-237732** Client ID: Units: **mg/Kg** Prep Date: **02/09/2017** Run No: **336229**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010D** BatchID: **237732** Analysis Date: **02/10/2017** Seq No: **7339680**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Chromium	BRL	2.50									
Copper	BRL	2.50									
Lead	BRL	5.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Thallium	BRL	5.00									
Zinc	BRL	5.00									

Sample ID: **LCS-237732** Client ID: Units: **mg/Kg** Prep Date: **02/09/2017** Run No: **336229**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010D** BatchID: **237732** Analysis Date: **02/10/2017** Seq No: **7339681**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	50.36	5.00	50.00		101	80	120				
Arsenic	50.26	5.00	50.00		101	80	120				
Barium	50.49	5.00	50.00		101	80	120				
Beryllium	49.99	2.50	50.00		100.0	80	120				
Cadmium	50.05	2.50	50.00		100	80	120				
Chromium	51.35	2.50	50.00		103	80	120				
Copper	50.89	2.50	50.00	0.05319	102	80	120				
Lead	50.60	5.00	50.00		101	80	120				
Nickel	50.06	5.00	50.00		100	80	120				
Selenium	49.90	5.00	50.00		99.8	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Troutman Sanders Plant Kraft
Workorder: 1702380

ANALYTICAL QC SUMMARY REPORT

BatchID: 237732

Sample ID: **LCS-237732** Client ID: Units: **mg/Kg** Prep Date: **02/09/2017** Run No: **336229**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010D** BatchID: **237732** Analysis Date: **02/10/2017** Seq No: **7339681**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Silver	5.038	2.50	5.000	0.02413	100	80	120				
Thallium	47.44	5.00	50.00	0.6911	93.5	80	120				
Zinc	49.09	5.00	50.00		98.2	80	120				

Sample ID: **1702332-051AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **02/09/2017** Run No: **336229**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010D** BatchID: **237732** Analysis Date: **02/10/2017** Seq No: **7339683**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	45.15	5.80	58.03	0.5220	76.9	75	125				
Arsenic	55.80	5.80	58.03	1.155	94.2	75	125				
Barium	118.4	5.80	58.03	61.83	97.4	75	125				
Beryllium	58.05	2.90	58.03	0.3216	99.5	75	125				
Cadmium	57.88	2.90	58.03		99.7	75	125				
Chromium	68.69	2.90	58.03	9.151	103	75	125				
Copper	68.42	2.90	58.03	7.840	104	75	125				
Lead	121.1	5.80	58.03	54.38	115	75	125				
Nickel	60.32	5.80	58.03	1.963	101	75	125				
Selenium	54.06	5.80	58.03		93.2	75	125				
Silver	5.748	2.90	5.803		99.1	75	125				
Thallium	55.61	5.80	58.03		95.8	75	125				
Zinc	89.06	5.80	58.03	24.06	112	75	125				

Sample ID: **1702332-051AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **02/09/2017** Run No: **336229**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010D** BatchID: **237732** Analysis Date: **02/10/2017** Seq No: **7339684**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	47.06	5.79	57.87	0.5220	80.4	75	125	45.15	4.13	20	
Arsenic	57.16	5.79	57.87	1.155	96.8	75	125	55.80	2.42	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Troutman Sanders Plant Kraft
Workorder: 1702380

ANALYTICAL QC SUMMARY REPORT

BatchID: 237732

Sample ID: **1702332-051AMSD** Client ID:
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010D**
Units: **mg/Kg-dry** Prep Date: **02/09/2017** Run No: **336229**
BatchID: **237732** Analysis Date: **02/10/2017** Seq No: **7339684**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	119.5	5.79	57.87	61.83	99.6	75	125	118.4	0.926	20	
Beryllium	59.25	2.89	57.87	0.3216	102	75	125	58.05	2.05	20	
Cadmium	59.20	2.89	57.87		102	75	125	57.88	2.25	20	
Chromium	71.17	2.89	57.87	9.151	107	75	125	68.69	3.56	20	
Copper	70.47	2.89	57.87	7.840	108	75	125	68.42	2.95	20	
Lead	122.0	5.79	57.87	54.38	117	75	125	121.1	0.682	20	
Nickel	61.61	5.79	57.87	1.963	103	75	125	60.32	2.13	20	
Selenium	55.12	5.79	57.87		95.2	75	125	54.06	1.94	20	
Silver	5.870	2.89	5.787		101	75	125	5.748	2.10	20	
Thallium	56.98	5.79	57.87		98.5	75	125	55.61	2.44	20	
Zinc	92.42	5.79	57.87	24.06	118	75	125	89.06	3.70	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 23, 2016

Michael Patinkin
Resolute Env. & Water Resources Consulting, LLC
1001 Weatherstone Pkwy
Woodstock GA 30188

TEL: (678) 232-9499
FAX: (888) 881-8219

RE: Troutman Sanders Plant Kraft

Dear Michael Patinkin: Order No: 1611C79

Analytical Environmental Services, Inc. received 19 samples on 11/12/2016 9:35:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

CHAIN OF CUSTODY

1611079

PLANT KRAFT

Work Order: PHASE II

Date: 11/11/16 Page 1 of 2

COMPANY:	ADDRESS:
GEORGIA POWER COMPANY	241 RALPH MCGILL BLVD ATLANTA GA 30308
PHONE: 678.232.9499	FAX: —
SAMPLED BY: MICHAEL PATINKIN (RESOLUTE)	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	RCRA METALS	VOCs	PAHs	BTEX	PAHs	DRO	GRO							No # of Containers
							EPA 6020B	EPA 8260B	EPA 8270D SIM	EPA 8260B	MD 11/11/16	EPA 8015C	EPA 8015C							
							PRESERVATION (See codes)													
							NA	S/M +I	NA	S/M +I		NA	S/M +I							
1	SB-45-4-0-1	11/10/16	1515	X		SO	X													1
2	SB-45-3-0-1	11/10/16	1555	X		SO	X													1
3	SB-46-2-0-1	11/10/16	1730	X		SO	X	X	X											6
4	SB-45-2-0-1	11/11/16	0810	X		SO	X													1
5	SB-45-1-0-1	11/11/16	0825	X		SO	X													1
6	SB-46-4-1-2	11/11/16	0925	X		SO	X	X	X											6
7	GW-46-4-8-12	11/11/16	0920	X		GW	X	X	X											4→6 (MD 11/11/16)
8	SB-11-0-1	11/11/16	0955	X		SO			X	X		X	X							6
9	SB-46-1-1-2	11/11/16	1020	X		SO	X	X	X											6
10	SB-46-3-2-3.3	11/11/16	1205	X		SO	X	X	X											6
11	SB-47-4-5	11/11/16	1440	X		SO	X	X	X											6
12	FB-1	11/11/16	1820	X		WW	X	X	X			X	X							5
13	RB-1	11/11/16	1830	X		W	X	X	X			X	X							5
14	~~DUP~~ (MD 11/11/16) GW-DUP-8	11/11/16	—	X		GW	X	X	X											4

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

REMARKS: 2 COOLERS

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1: MICHAEL PATINKIN	11/11/16 1900	1:	11/12/16 9:35AM
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: TROUTMAN SANDERS PLANT KRAFT

PROJECT #: —

SITE ADDRESS: 155 CROSSGATE ROAD PORT WENTWORTH GA

SEND REPORT TO: STEPHEN.WILSON@RESOLUTE-ENV.COM

INVOICE TO: MICHAEL.PATINKIN@[illegible]

(IF DIFFERENT FROM ABOVE) LEA MILLET (GEORGIA POWER)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 58

Turnaround Time Request

- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other

STATE PROGRAM (if any): HSRA

E-mail? Fax?

DATA PACKAGE: I (•) II ( ) III ( ) IV ( )

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD:

OUT 11/11/16 VIA: FEDEX

IN / / VIA:

CLIENT (FedEx) UPS MAIL COURIER

GREYHOUND OTHER_____

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

1611079 Work Order: PLANT KRAFT PHASE II

Date: 11/11/16 Page 2 of 2

COMPANY: GEORGIA POWER COMPANY
ADDRESS: 241 RALPH MCGILL BLVD ATLANTA, GA 30308
PHONE: 678.232.9499
FAX:
SAMPLED BY: MICHAEL PATINKIN (RESOLUTE)
SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)
	GW MP 11/11/16					
1	~~SB~~ 47-4-5	11/11/16	1440	X		GW
2	GW-19-1-2.3	11/11/16	1600	X		GW
3	SB-19-1-2.5	11/11/16	1600	X		SO
4	SB-26-1-2	11/11/16	1700	X		SO
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						

ANALYSIS REQUESTED

	RCRA 8 MET (6010B)	VOCs (8260B)	PAH (8270D)	BTEX (8260B)	DRO (8015)	GRO (8015)								
PRESERVATION (See codes)														
NA	X	X	X											
S/M+I	X	X	X											
MA	X	X	½											
S/M+I			X	X	X	X								
NA														
S/M+I														

MP 11/11/16

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

REMARKS	No # of Containers
2 COOLERS	4
	4
	6
	6

RELINQUISHED BY: DATE/TIME: RECEIVED BY: DATE/TIME:

	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1:	MICHAEL PATINKIN	11/11/16 1900		11/14/16 0:35AM
2:				
3:				

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD:
OUT 11/11/16 VIA: FEDEX
IN / / VIA:
CLIENT (FedEx) UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: TRUITMAN SANDERS PLANT KRAFT
PROJECT #:
SITE ADDRESS: 155 CROSSGATE ROAD PORT WENTWORTH, GA
SEND REPORT TO: STEPHEN.WILSON@RESOLUTEENV.COM
INVOICE TO: MICHAEL.PATINKIN@RESOLUTEENV.COM
(IF DIFFERENT FROM ABOVE) LEA MILLET (GEORGIA POWER)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 20

Turnaround Time Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other

STATE PROGRAM (if any): GEORGIA
E-mail? Fax?
DATA PACKAGE: I (II) III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

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MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 23-Nov-16

Client: Resolute Env. & Water Resources Consulting, LLC
Project: Troutman Sanders Plant Kraft
Lab ID: 1611C79

Case Narrative

Volatile Organic Compounds Analysis by Method 8260B:

Percent recovery for the internal standard compound 1,4-Dichlorobenzene-d4 on sample 1611C79-003A was outside control limits biased low due to suspected matrix interference. All other internal standard recoveries were within control limits.

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-45-4-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/10/2016 3:15:00 PM
Lab ID:	1611C79-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.0949		mg/Kg-dry	232972	1	11/16/2016 15:05	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.08		mg/Kg-dry	233239	1	11/18/2016 20:45	JL
Barium	8.46	4.08		mg/Kg-dry	233239	1	11/18/2016 20:45	JL
Cadmium	BRL	2.04		mg/Kg-dry	233239	1	11/18/2016 20:45	JL
Chromium	3.37	2.04		mg/Kg-dry	233239	1	11/18/2016 20:45	JL
Lead	8.31	4.08		mg/Kg-dry	233239	1	11/18/2016 20:45	JL
Selenium	BRL	4.08		mg/Kg-dry	233239	1	11/18/2016 20:45	JL
Silver	BRL	2.04		mg/Kg-dry	233239	1	11/18/2016 20:45	JL
PERCENT MOISTURE D2216								
Percent Moisture	0.640	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-45-3-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/10/2016 3:55:00 PM
Lab ID:	1611C79-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.0930		mg/Kg-dry	232972	1	11/16/2016 14:26	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	3.17		mg/Kg-dry	233239	1	11/18/2016 21:14	JL
Barium	20.2	3.17		mg/Kg-dry	233239	1	11/18/2016 21:14	JL
Cadmium	BRL	1.58		mg/Kg-dry	233239	1	11/18/2016 21:14	JL
Chromium	13.3	1.58		mg/Kg-dry	233239	1	11/18/2016 21:14	JL
Lead	62.1	3.17		mg/Kg-dry	233239	1	11/18/2016 21:14	JL
Selenium	BRL	3.17		mg/Kg-dry	233239	1	11/18/2016 21:14	JL
Silver	BRL	1.58		mg/Kg-dry	233239	1	11/18/2016 21:14	JL
PERCENT MOISTURE D2216								
Percent Moisture	5.38	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-2-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/10/2016 5:30:00 PM
Lab ID:	1611C79-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.101		mg/Kg-dry	232972	1	11/16/2016 15:07	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,1,2,2-Tetrachloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,1,2-Trichloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,1-Dichloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,1-Dichloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,2,4-Trichlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,2-Dibromo-3-chloropropane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,2-Dibromoethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,2-Dichlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,2-Dichloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,2-Dichloropropane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,3-Dichlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
1,4-Dichlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
2-Butanone	BRL	33		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
2-Hexanone	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
4-Methyl-2-pentanone	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Acetone	BRL	66		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Benzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Bromodichloromethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Bromoform	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Bromomethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Carbon disulfide	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Carbon tetrachloride	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Chlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Chloroethane	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Chloroform	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Chloromethane	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
cis-1,2-Dichloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
cis-1,3-Dichloropropene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Cyclohexane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Dibromochloromethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Dichlorodifluoromethane	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Ethylbenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Freon-113	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Isopropylbenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
m,p-Xylene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Methyl acetate	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Methyl tert-butyl ether	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-2-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/10/2016 5:30:00 PM
Lab ID:	1611C79-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Methylene chloride	BRL	13		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
o-Xylene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Styrene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Tetrachloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Toluene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
trans-1,2-Dichloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
trans-1,3-Dichloropropene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Trichloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Trichlorofluoromethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Vinyl chloride	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 10:31	MD
Surr: 4-Bromofluorobenzene	65.6	70-128	S	%REC	233162	1	11/18/2016 10:31	MD
Surr: Dibromofluoromethane	116	78.2-128		%REC	233162	1	11/18/2016 10:31	MD
Surr: Toluene-d8	88.1	76.5-116		%REC	233162	1	11/18/2016 10:31	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Acenaphthylene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
1-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
2-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Acenaphthene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Fluorene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Phenanthrene	960	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Anthracene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Fluoranthene	2000	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Pyrene	1600	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Benz(a)anthracene	820	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Chrysene	1300	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Benzo(b)fluoranthene	1700	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Benzo(k)fluoranthene	660	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Benzo(a)pyrene	920	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Dibenz(a,h)anthracene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Benzo(g,h,i)perylene	620	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Indeno(1,2,3-cd)pyrene	530	340		ug/Kg-dry	232881	1	11/21/2016 20:40	RF
Surr: 2-Fluorobiphenyl	70.6	56.7-120		%REC	232881	1	11/21/2016 20:40	RF
Surr: 4-Terphenyl-d14	85.4	60-120		%REC	232881	1	11/21/2016 20:40	RF
Surr: Nitrobenzene-d5	68.1	52.6-120		%REC	232881	1	11/21/2016 20:40	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.64		mg/Kg-dry	233239	1	11/18/2016 21:17	JL
Barium	25.8	4.64		mg/Kg-dry	233239	1	11/18/2016 21:17	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-2-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/10/2016 5:30:00 PM
Lab ID:	1611C79-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	2.32		mg/Kg-dry	233239	1	11/18/2016 21:17	JL
Chromium	7.82	2.32		mg/Kg-dry	233239	1	11/18/2016 21:17	JL
Lead	16.4	4.64		mg/Kg-dry	233239	1	11/18/2016 21:17	JL
Selenium	BRL	4.64		mg/Kg-dry	233239	1	11/18/2016 21:17	JL
Silver	BRL	2.32		mg/Kg-dry	233239	1	11/18/2016 21:17	JL
PERCENT MOISTURE D2216								
Percent Moisture	3.41	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-45-2-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 8:10:00 AM
Lab ID:	1611C79-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.130		mg/Kg-dry	232972	1	11/16/2016 15:10	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.41		mg/Kg-dry	233239	1	11/18/2016 21:27	JL
Barium	23.4	4.41		mg/Kg-dry	233239	1	11/18/2016 21:27	JL
Cadmium	BRL	2.21		mg/Kg-dry	233239	1	11/18/2016 21:27	JL
Chromium	6.80	2.21		mg/Kg-dry	233239	1	11/18/2016 21:27	JL
Lead	14.9	4.41		mg/Kg-dry	233239	1	11/18/2016 21:27	JL
Selenium	BRL	4.41		mg/Kg-dry	233239	1	11/18/2016 21:27	JL
Silver	BRL	2.21		mg/Kg-dry	233239	1	11/18/2016 21:27	JL
PERCENT MOISTURE D2216								
Percent Moisture	27.0	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-45-1-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 8:25:00 AM
Lab ID:	1611C79-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.0919		mg/Kg-dry	232972	1	11/16/2016 15:12	JR
METALS, TOTAL SW6010D					**(SW3050B)**			
Arsenic	4.03	3.88		mg/Kg-dry	233239	1	11/18/2016 21:30	JL
Barium	46.3	3.88		mg/Kg-dry	233239	1	11/18/2016 21:30	JL
Cadmium	BRL	1.94		mg/Kg-dry	233239	1	11/18/2016 21:30	JL
Chromium	8.64	1.94		mg/Kg-dry	233239	1	11/18/2016 21:30	JL
Lead	75.9	3.88		mg/Kg-dry	233239	1	11/18/2016 21:30	JL
Selenium	BRL	3.88		mg/Kg-dry	233239	1	11/18/2016 21:30	JL
Silver	BRL	1.94		mg/Kg-dry	233239	1	11/18/2016 21:30	JL
PERCENT MOISTURE D2216								
Percent Moisture	1.07	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-4-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 9:25:00 AM
Lab ID:	1611C79-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.0973		mg/Kg-dry	232972	1	11/16/2016 15:14	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,1,2,2-Tetrachloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,1,2-Trichloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,1-Dichloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,1-Dichloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,2,4-Trichlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,2-Dibromo-3-chloropropane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,2-Dibromoethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,2-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,2-Dichloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,2-Dichloropropane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,3-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
1,4-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
2-Butanone	BRL	39		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
2-Hexanone	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
4-Methyl-2-pentanone	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Acetone	BRL	78		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Benzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Bromodichloromethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Bromoform	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Bromomethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Carbon disulfide	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Carbon tetrachloride	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Chlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Chloroethane	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Chloroform	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Chloromethane	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
cis-1,2-Dichloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
cis-1,3-Dichloropropene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Cyclohexane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Dibromochloromethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Dichlorodifluoromethane	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Ethylbenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Freon-113	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Isopropylbenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
m,p-Xylene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Methyl acetate	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Methyl tert-butyl ether	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-4-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 9:25:00 AM
Lab ID:	1611C79-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Methylene chloride	BRL	16		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
o-Xylene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Styrene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Tetrachloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Toluene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
trans-1,2-Dichloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
trans-1,3-Dichloropropene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Trichloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Trichlorofluoromethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Vinyl chloride	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:10	MD
Surr: 4-Bromofluorobenzene	91.9	70-128		%REC	233162	1	11/18/2016 02:10	MD
Surr: Dibromofluoromethane	106	78.2-128		%REC	233162	1	11/18/2016 02:10	MD
Surr: Toluene-d8	95.2	76.5-116		%REC	233162	1	11/18/2016 02:10	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Acenaphthylene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
1-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
2-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Acenaphthene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Fluorene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Phenanthrene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Anthracene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Pyrene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Benz(a)anthracene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Chrysene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Benzo(b)fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Benzo(k)fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Benzo(a)pyrene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Dibenz(a,h)anthracene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Benzo(g,h,i)perylene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Indeno(1,2,3-cd)pyrene	BRL	340		ug/Kg-dry	232881	1	11/15/2016 23:54	RF
Surr: 2-Fluorobiphenyl	74.9	56.7-120		%REC	232881	1	11/15/2016 23:54	RF
Surr: 4-Terphenyl-d14	83.9	60-120		%REC	232881	1	11/15/2016 23:54	RF
Surr: Nitrobenzene-d5	71.1	52.6-120		%REC	232881	1	11/15/2016 23:54	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.11		mg/Kg-dry	233239	1	11/18/2016 21:34	JL
Barium	9.82	4.11		mg/Kg-dry	233239	1	11/18/2016 21:34	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-4-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 9:25:00 AM
Lab ID:	1611C79-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	2.06		mg/Kg-dry	233239	1	11/18/2016 21:34	JL
Chromium	2.76	2.06		mg/Kg-dry	233239	1	11/18/2016 21:34	JL
Lead	6.96	4.11		mg/Kg-dry	233239	1	11/18/2016 21:34	JL
Selenium	BRL	4.11		mg/Kg-dry	233239	1	11/18/2016 21:34	JL
Silver	BRL	2.06		mg/Kg-dry	233239	1	11/18/2016 21:34	JL
PERCENT MOISTURE D2216								
Percent Moisture	3.73	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-46-4-8-12
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 9:20:00 AM
Lab ID:	1611C79-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
2-Butanone	BRL	50		ug/L	233191	1	11/18/2016 02:31	NP
2-Hexanone	BRL	10		ug/L	233191	1	11/18/2016 02:31	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233191	1	11/18/2016 02:31	NP
Acetone	BRL	50		ug/L	233191	1	11/18/2016 02:31	NP
Benzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Bromodichloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Bromoform	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Bromomethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Carbon disulfide	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Carbon tetrachloride	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Chlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Chloroethane	BRL	10		ug/L	233191	1	11/18/2016 02:31	NP
Chloroform	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Chloromethane	BRL	10		ug/L	233191	1	11/18/2016 02:31	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Cyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Dibromochloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Dichlorodifluoromethane	BRL	10		ug/L	233191	1	11/18/2016 02:31	NP
Ethylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Freon-113	BRL	10		ug/L	233191	1	11/18/2016 02:31	NP
Isopropylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
m,p-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Methyl acetate	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Methylcyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Methylene chloride	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
o-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-46-4-8-12
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 9:20:00 AM
Lab ID:	1611C79-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Tetrachloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Toluene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Trichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:31	NP
Vinyl chloride	BRL	2.0		ug/L	233191	1	11/18/2016 02:31	NP
Surr: 4-Bromofluorobenzene	93.7	66.1-129		%REC	233191	1	11/18/2016 02:31	NP
Surr: Dibromofluoromethane	101	83.6-123		%REC	233191	1	11/18/2016 02:31	NP
Surr: Toluene-d8	98.9	81.8-118		%REC	233191	1	11/18/2016 02:31	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233130	1	11/18/2016 12:56	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Acenaphthylene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
1-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
2-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Acenaphthene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Fluorene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Phenanthrene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Anthracene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Pyrene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Benz(a)anthracene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Chrysene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Benzo(b)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Benzo(k)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Benzo(a)pyrene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	232885	1	11/21/2016 08:40	RF
Surr: Nitrobenzene-d5	77	56.9-120		%REC	232885	1	11/21/2016 08:40	RF
Surr: 2-Fluorobiphenyl	73	55.6-120		%REC	232885	1	11/21/2016 08:40	RF
Surr: 4-Terphenyl-d14	71	45.7-120		%REC	232885	1	11/21/2016 08:40	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233147	1	11/18/2016 21:14	IO
Barium	0.109	0.0200		mg/L	233147	1	11/18/2016 21:14	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-46-4-8-12
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 9:20:00 AM
Lab ID:	1611C79-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233147	1	11/18/2016 21:14	IO
Chromium	BRL	0.0100		mg/L	233147	1	11/18/2016 21:14	IO
Lead	BRL	0.0100		mg/L	233147	1	11/18/2016 21:14	IO
Selenium	BRL	0.0200		mg/L	233147	1	11/18/2016 21:14	IO
Silver	BRL	0.0100		mg/L	233147	1	11/18/2016 21:14	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-11-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 9:55:00 AM
Lab ID:	1611C79-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.77		ug/Kg-dry	233234	1	11/17/2016 20:51	JE
Toluene	BRL	0.77		ug/Kg-dry	233234	1	11/17/2016 20:51	JE
Ethylbenzene	BRL	0.77		ug/Kg-dry	233234	1	11/17/2016 20:51	JE
m,p-Xylene	BRL	0.77		ug/Kg-dry	233234	1	11/17/2016 20:51	JE
o-Xylene	BRL	0.77		ug/Kg-dry	233234	1	11/17/2016 20:51	JE
Surr: 4-Bromofluorobenzene	79.7	70-128		%REC	233234	1	11/17/2016 20:51	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Acenaphthylene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
1-Methylnaphthalene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
2-Methylnaphthalene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Acenaphthene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Fluorene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Phenanthrene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Anthracene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Fluoranthene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Pyrene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Benz(a)anthracene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Chrysene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Benzo(b)fluoranthene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Benzo(k)fluoranthene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Benzo(a)pyrene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Dibenz(a,h)anthracene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Benzo(g,h,i)perylene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Indeno(1,2,3-cd)pyrene	BRL	400		ug/Kg-dry	232881	1	11/21/2016 21:10	RF
Surr: 2-Fluorobiphenyl	72.7	56.7-120		%REC	232881	1	11/21/2016 21:10	RF
Surr: 4-Terphenyl-d14	97.1	60-120		%REC	232881	1	11/21/2016 21:10	RF
Surr: Nitrobenzene-d5	69.1	52.6-120		%REC	232881	1	11/21/2016 21:10	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.39		mg/Kg-dry	233234	1	11/17/2016 20:51	JE
Surr: a.a.a-trifluorotoluene	114	69.8-134		%REC	233234	1	11/17/2016 20:51	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.0		mg/Kg-dry	232806	1	11/15/2016 15:58	RF
Surr: Dioctylphthalate	62.4	50.1-122		%REC	232806	1	11/15/2016 15:58	RF
PERCENT MOISTURE D2216								
Percent Moisture	16.7	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-1-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 10:20:00 AM
Lab ID:	1611C79-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.101		mg/Kg-dry	232972	1	11/16/2016 15:16	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,1,2,2-Tetrachloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,1,2-Trichloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,1-Dichloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,1-Dichloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,2,4-Trichlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,2-Dibromo-3-chloropropane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,2-Dibromoethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,2-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,2-Dichloroethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,2-Dichloropropane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,3-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
1,4-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
2-Butanone	BRL	39		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
2-Hexanone	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
4-Methyl-2-pentanone	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Acetone	BRL	78		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Benzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Bromodichloromethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Bromoform	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Bromomethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Carbon disulfide	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Carbon tetrachloride	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Chlorobenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Chloroethane	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Chloroform	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Chloromethane	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
cis-1,2-Dichloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
cis-1,3-Dichloropropene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Cyclohexane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Dibromochloromethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Dichlorodifluoromethane	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Ethylbenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Freon-113	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Isopropylbenzene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
m,p-Xylene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Methyl acetate	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Methyl tert-butyl ether	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-1-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 10:20:00 AM
Lab ID:	1611C79-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Methylene chloride	BRL	16		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
o-Xylene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Styrene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Tetrachloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Toluene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
trans-1,2-Dichloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
trans-1,3-Dichloropropene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Trichloroethene	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Trichlorofluoromethane	BRL	3.9		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Vinyl chloride	BRL	7.8		ug/Kg-dry	233162	1	11/18/2016 02:33	MD
Surr: 4-Bromofluorobenzene	95	70-128		%REC	233162	1	11/18/2016 02:33	MD
Surr: Dibromofluoromethane	106	78.2-128		%REC	233162	1	11/18/2016 02:33	MD
Surr: Toluene-d8	96.8	76.5-116		%REC	233162	1	11/18/2016 02:33	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Acenaphthylene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
1-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
2-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Acenaphthene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Fluorene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Phenanthrene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Anthracene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Pyrene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Benz(a)anthracene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Chrysene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Benzo(b)fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Benzo(k)fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Benzo(a)pyrene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Dibenz(a,h)anthracene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Benzo(g,h,i)perylene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Indeno(1,2,3-cd)pyrene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 03:54	RF
Surr: 2-Fluorobiphenyl	73.9	56.7-120		%REC	232881	1	11/19/2016 03:54	RF
Surr: 4-Terphenyl-d14	83.9	60-120		%REC	232881	1	11/19/2016 03:54	RF
Surr: Nitrobenzene-d5	53.1	52.6-120		%REC	232881	1	11/19/2016 03:54	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	2.74		mg/Kg-dry	233239	1	11/18/2016 21:37	JL
Barium	5.47	2.74		mg/Kg-dry	233239	1	11/18/2016 21:37	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-1-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 10:20:00 AM
Lab ID:	1611C79-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	1.37		mg/Kg-dry	233239	1	11/18/2016 21:37	JL
Chromium	1.54	1.37		mg/Kg-dry	233239	1	11/18/2016 21:37	JL
Lead	BRL	2.74		mg/Kg-dry	233239	1	11/18/2016 21:37	JL
Selenium	BRL	2.74		mg/Kg-dry	233239	1	11/18/2016 21:37	JL
Silver	BRL	1.37		mg/Kg-dry	233239	1	11/18/2016 21:37	JL
PERCENT MOISTURE D2216								
Percent Moisture	2.56	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-3-2-3.3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 12:05:00 PM
Lab ID:	1611C79-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.102		mg/Kg-dry	232972	1	11/16/2016 15:18	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,1,2,2-Tetrachloroethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,1,2-Trichloroethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,1-Dichloroethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,1-Dichloroethene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,2,4-Trichlorobenzene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,2-Dibromo-3-chloropropane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,2-Dibromoethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,2-Dichlorobenzene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,2-Dichloroethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,2-Dichloropropane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,3-Dichlorobenzene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
1,4-Dichlorobenzene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
2-Butanone	BRL	38		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
2-Hexanone	BRL	7.6		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
4-Methyl-2-pentanone	BRL	7.6		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Acetone	BRL	76		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Benzene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Bromodichloromethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Bromoform	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Bromomethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Carbon disulfide	BRL	7.6		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Carbon tetrachloride	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Chlorobenzene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Chloroethane	BRL	7.6		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Chloroform	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Chloromethane	BRL	7.6		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
cis-1,2-Dichloroethene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
cis-1,3-Dichloropropene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Cyclohexane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Dibromochloromethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Dichlorodifluoromethane	BRL	7.6		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Ethylbenzene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Freon-113	BRL	7.6		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Isopropylbenzene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
m,p-Xylene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Methyl acetate	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Methyl tert-butyl ether	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-3-2-3.3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 12:05:00 PM
Lab ID:	1611C79-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Methylene chloride	BRL	15		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
o-Xylene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Styrene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Tetrachloroethene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Toluene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
trans-1,2-Dichloroethene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
trans-1,3-Dichloropropene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Trichloroethene	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Trichlorofluoromethane	BRL	3.8		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Vinyl chloride	BRL	7.6		ug/Kg-dry	233162	1	11/18/2016 02:57	MD
Surr: 4-Bromofluorobenzene	91.8	70-128		%REC	233162	1	11/18/2016 02:57	MD
Surr: Dibromofluoromethane	102	78.2-128		%REC	233162	1	11/18/2016 02:57	MD
Surr: Toluene-d8	93.9	76.5-116		%REC	233162	1	11/18/2016 02:57	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Acenaphthylene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
1-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
2-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Acenaphthene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Fluorene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Phenanthrene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Anthracene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Pyrene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Benz(a)anthracene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Chrysene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Benzo(b)fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Benzo(k)fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Benzo(a)pyrene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Dibenz(a,h)anthracene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Benzo(g,h,i)perylene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Indeno(1,2,3-cd)pyrene	BRL	340		ug/Kg-dry	232881	1	11/19/2016 04:21	RF
Surr: 2-Fluorobiphenyl	73.6	56.7-120		%REC	232881	1	11/19/2016 04:21	RF
Surr: 4-Terphenyl-d14	81.4	60-120		%REC	232881	1	11/19/2016 04:21	RF
Surr: Nitrobenzene-d5	53.2	52.6-120		%REC	232881	1	11/19/2016 04:21	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.59		mg/Kg-dry	233239	1	11/18/2016 21:40	JL
Barium	6.35	4.59		mg/Kg-dry	233239	1	11/18/2016 21:40	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-46-3-2-3.3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 12:05:00 PM
Lab ID:	1611C79-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	2.29		mg/Kg-dry	233239	1	11/18/2016 21:40	JL
Chromium	BRL	2.29		mg/Kg-dry	233239	1	11/18/2016 21:40	JL
Lead	BRL	4.59		mg/Kg-dry	233239	1	11/18/2016 21:40	JL
Selenium	BRL	4.59		mg/Kg-dry	233239	1	11/18/2016 21:40	JL
Silver	BRL	2.29		mg/Kg-dry	233239	1	11/18/2016 21:40	JL
PERCENT MOISTURE D2216								
Percent Moisture	3.73	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-47-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 2:40:00 PM
Lab ID:	1611C79-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.103		mg/Kg-dry	232972	1	11/16/2016 15:21	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,1,2,2-Tetrachloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,1,2-Trichloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,1-Dichloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,1-Dichloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,2,4-Trichlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,2-Dibromo-3-chloropropane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,2-Dibromoethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,2-Dichlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,2-Dichloroethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,2-Dichloropropane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,3-Dichlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
1,4-Dichlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
2-Butanone	BRL	33		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
2-Hexanone	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
4-Methyl-2-pentanone	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Acetone	BRL	66		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Benzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Bromodichloromethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Bromoform	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Bromomethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Carbon disulfide	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Carbon tetrachloride	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Chlorobenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Chloroethane	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Chloroform	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Chloromethane	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
cis-1,2-Dichloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
cis-1,3-Dichloropropene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Cyclohexane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Dibromochloromethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Dichlorodifluoromethane	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Ethylbenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Freon-113	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Isopropylbenzene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
m,p-Xylene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Methyl acetate	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Methyl tert-butyl ether	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-47-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 2:40:00 PM
Lab ID:	1611C79-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Methylene chloride	BRL	13		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
o-Xylene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Styrene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Tetrachloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Toluene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
trans-1,2-Dichloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
trans-1,3-Dichloropropene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Trichloroethene	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Trichlorofluoromethane	BRL	3.3		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Vinyl chloride	BRL	6.6		ug/Kg-dry	233162	1	11/18/2016 03:20	MD
Surr: 4-Bromofluorobenzene	90.4	70-128		%REC	233162	1	11/18/2016 03:20	MD
Surr: Dibromofluoromethane	106	78.2-128		%REC	233162	1	11/18/2016 03:20	MD
Surr: Toluene-d8	95.1	76.5-116		%REC	233162	1	11/18/2016 03:20	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Acenaphthylene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
1-Methylnaphthalene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
2-Methylnaphthalene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Acenaphthene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Fluorene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Phenanthrene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Anthracene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Fluoranthene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Pyrene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Benz(a)anthracene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Chrysene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Benzo(b)fluoranthene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Benzo(k)fluoranthene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Benzo(a)pyrene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Dibenz(a,h)anthracene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Benzo(g,h,i)perylene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Indeno(1,2,3-cd)pyrene	BRL	350		ug/Kg-dry	232881	1	11/19/2016 04:49	RF
Surr: 2-Fluorobiphenyl	73.5	56.7-120		%REC	232881	1	11/19/2016 04:49	RF
Surr: 4-Terphenyl-d14	86.6	60-120		%REC	232881	1	11/19/2016 04:49	RF
Surr: Nitrobenzene-d5	55.2	52.6-120		%REC	232881	1	11/19/2016 04:49	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	3.44		mg/Kg-dry	233239	1	11/18/2016 21:44	JL
Barium	BRL	3.44		mg/Kg-dry	233239	1	11/18/2016 21:44	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-47-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 2:40:00 PM
Lab ID:	1611C79-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	1.72		mg/Kg-dry	233239	1	11/18/2016 21:44	JL
Chromium	BRL	1.72		mg/Kg-dry	233239	1	11/18/2016 21:44	JL
Lead	BRL	3.44		mg/Kg-dry	233239	1	11/18/2016 21:44	JL
Selenium	BRL	3.44		mg/Kg-dry	233239	1	11/18/2016 21:44	JL
Silver	BRL	1.72		mg/Kg-dry	233239	1	11/18/2016 21:44	JL
PERCENT MOISTURE D2216								
Percent Moisture	4.49	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 6:20:00 PM
Lab ID:	1611C79-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
2-Butanone	BRL	50		ug/L	233191	1	11/18/2016 02:55	NP
2-Hexanone	BRL	10		ug/L	233191	1	11/18/2016 02:55	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233191	1	11/18/2016 02:55	NP
Acetone	BRL	50		ug/L	233191	1	11/18/2016 02:55	NP
Benzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Bromodichloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Bromoform	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Bromomethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Carbon disulfide	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Carbon tetrachloride	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Chlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Chloroethane	BRL	10		ug/L	233191	1	11/18/2016 02:55	NP
Chloroform	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Chloromethane	BRL	10		ug/L	233191	1	11/18/2016 02:55	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Cyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Dibromochloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Dichlorodifluoromethane	BRL	10		ug/L	233191	1	11/18/2016 02:55	NP
Ethylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Freon-113	BRL	10		ug/L	233191	1	11/18/2016 02:55	NP
Isopropylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
m,p-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Methyl acetate	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Methylcyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Methylene chloride	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
o-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 6:20:00 PM
Lab ID:	1611C79-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Tetrachloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Toluene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Trichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233191	1	11/18/2016 02:55	NP
Vinyl chloride	BRL	2.0		ug/L	233191	1	11/18/2016 02:55	NP
Surr: 4-Bromofluorobenzene	92.1	66.1-129		%REC	233191	1	11/18/2016 02:55	NP
Surr: Dibromofluoromethane	101	83.6-123		%REC	233191	1	11/18/2016 02:55	NP
Surr: Toluene-d8	99.3	81.8-118		%REC	233191	1	11/18/2016 02:55	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233130	1	11/18/2016 12:58	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/18/2016 07:54	JE
Surr: a.a.a-trifluorotoluene	104	75.1-120		%REC	233054	1	11/18/2016 07:54	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	232797	1	11/15/2016 14:02	RF
Surr: Dioctylphthalate	69.2	47-119		%REC	232797	1	11/15/2016 14:02	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Acenaphthylene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
1-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
2-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Acenaphthene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Fluorene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Phenanthrene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Anthracene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Pyrene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Benz(a)anthracene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Chrysene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Benzo(b)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Benzo(k)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Benzo(a)pyrene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
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- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 6:20:00 PM
Lab ID:	1611C79-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	232885	1	11/21/2016 19:12	RF
Surr: Nitrobenzene-d5	66.6	56.9-120		%REC	232885	1	11/21/2016 19:12	RF
Surr: 2-Fluorobiphenyl	71.4	55.6-120		%REC	232885	1	11/21/2016 19:12	RF
Surr: 4-Terphenyl-d14	87.2	45.7-120		%REC	232885	1	11/21/2016 19:12	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233147	1	11/18/2016 21:18	IO
Barium	BRL	0.0200		mg/L	233147	1	11/18/2016 21:18	IO
Cadmium	BRL	0.0050		mg/L	233147	1	11/18/2016 21:18	IO
Chromium	BRL	0.0100		mg/L	233147	1	11/18/2016 21:18	IO
Lead	BRL	0.0100		mg/L	233147	1	11/18/2016 21:18	IO
Selenium	BRL	0.0200		mg/L	233147	1	11/18/2016 21:18	IO
Silver	BRL	0.0100		mg/L	233147	1	11/18/2016 21:18	IO

Qualifiers:

- * Value exceeds maximum contaminant level
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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 6:30:00 PM
Lab ID:	1611C79-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
2-Butanone	BRL	50		ug/L	233191	1	11/18/2016 03:18	NP
2-Hexanone	BRL	10		ug/L	233191	1	11/18/2016 03:18	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233191	1	11/18/2016 03:18	NP
Acetone	BRL	50		ug/L	233191	1	11/18/2016 03:18	NP
Benzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Bromodichloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Bromoform	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Bromomethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Carbon disulfide	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Carbon tetrachloride	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Chlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Chloroethane	BRL	10		ug/L	233191	1	11/18/2016 03:18	NP
Chloroform	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Chloromethane	BRL	10		ug/L	233191	1	11/18/2016 03:18	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Cyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Dibromochloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Dichlorodifluoromethane	BRL	10		ug/L	233191	1	11/18/2016 03:18	NP
Ethylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Freon-113	BRL	10		ug/L	233191	1	11/18/2016 03:18	NP
Isopropylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
m,p-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Methyl acetate	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Methylcyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Methylene chloride	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
o-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
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- N Analyte not NELAC certified
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- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 6:30:00 PM
Lab ID:	1611C79-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Tetrachloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Toluene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Trichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:18	NP
Vinyl chloride	BRL	2.0		ug/L	233191	1	11/18/2016 03:18	NP
Surr: 4-Bromofluorobenzene	92	66.1-129		%REC	233191	1	11/18/2016 03:18	NP
Surr: Dibromofluoromethane	103	83.6-123		%REC	233191	1	11/18/2016 03:18	NP
Surr: Toluene-d8	101	81.8-118		%REC	233191	1	11/18/2016 03:18	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233130	1	11/18/2016 13:00	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/18/2016 08:22	JE
Surr: a.a.a-trifluorotoluene	109	75.1-120		%REC	233054	1	11/18/2016 08:22	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	232797	1	11/15/2016 14:25	RF
Surr: Dioctylphthalate	57.9	47-119		%REC	232797	1	11/15/2016 14:25	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Acenaphthylene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
1-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
2-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Acenaphthene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Fluorene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Phenanthrene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Anthracene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Pyrene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Benz(a)anthracene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Chrysene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Benzo(b)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Benzo(k)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Benzo(a)pyrene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 6:30:00 PM
Lab ID:	1611C79-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	232885	1	11/21/2016 18:44	RF
Surr: Nitrobenzene-d5	64.1	56.9-120		%REC	232885	1	11/21/2016 18:44	RF
Surr: 2-Fluorobiphenyl	65.4	55.6-120		%REC	232885	1	11/21/2016 18:44	RF
Surr: 4-Terphenyl-d14	81.5	45.7-120		%REC	232885	1	11/21/2016 18:44	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233147	1	11/18/2016 21:21	IO
Barium	BRL	0.0200		mg/L	233147	1	11/18/2016 21:21	IO
Cadmium	BRL	0.0050		mg/L	233147	1	11/18/2016 21:21	IO
Chromium	BRL	0.0100		mg/L	233147	1	11/18/2016 21:21	IO
Lead	BRL	0.0100		mg/L	233147	1	11/18/2016 21:21	IO
Selenium	BRL	0.0200		mg/L	233147	1	11/18/2016 21:21	IO
Silver	BRL	0.0100		mg/L	233147	1	11/18/2016 21:21	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-DUP-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016
Lab ID:	1611C79-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
2-Butanone	BRL	50		ug/L	233191	1	11/18/2016 03:41	NP
2-Hexanone	BRL	10		ug/L	233191	1	11/18/2016 03:41	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233191	1	11/18/2016 03:41	NP
Acetone	BRL	50		ug/L	233191	1	11/18/2016 03:41	NP
Benzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Bromodichloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Bromoform	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Bromomethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Carbon disulfide	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Carbon tetrachloride	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Chlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Chloroethane	BRL	10		ug/L	233191	1	11/18/2016 03:41	NP
Chloroform	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Chloromethane	BRL	10		ug/L	233191	1	11/18/2016 03:41	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Cyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Dibromochloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Dichlorodifluoromethane	BRL	10		ug/L	233191	1	11/18/2016 03:41	NP
Ethylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Freon-113	BRL	10		ug/L	233191	1	11/18/2016 03:41	NP
Isopropylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
m,p-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Methyl acetate	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Methylcyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Methylene chloride	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
o-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-DUP-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016
Lab ID:	1611C79-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Tetrachloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Toluene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Trichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233191	1	11/18/2016 03:41	NP
Vinyl chloride	BRL	2.0		ug/L	233191	1	11/18/2016 03:41	NP
Surr: 4-Bromofluorobenzene	92.8	66.1-129		%REC	233191	1	11/18/2016 03:41	NP
Surr: Dibromofluoromethane	103	83.6-123		%REC	233191	1	11/18/2016 03:41	NP
Surr: Toluene-d8	101	81.8-118		%REC	233191	1	11/18/2016 03:41	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233130	1	11/18/2016 13:02	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Acenaphthylene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
1-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
2-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Acenaphthene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Fluorene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Phenanthrene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Anthracene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Pyrene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Benz(a)anthracene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Chrysene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Benzo(b)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Benzo(k)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Benzo(a)pyrene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	232885	1	11/21/2016 18:17	RF
Surr: Nitrobenzene-d5	65.7	56.9-120		%REC	232885	1	11/21/2016 18:17	RF
Surr: 2-Fluorobiphenyl	66.5	55.6-120		%REC	232885	1	11/21/2016 18:17	RF
Surr: 4-Terphenyl-d14	87.2	45.7-120		%REC	232885	1	11/21/2016 18:17	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233147	1	11/18/2016 21:30	IO
Barium	0.113	0.0200		mg/L	233147	1	11/18/2016 21:30	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-DUP-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016
Lab ID:	1611C79-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233147	1	11/18/2016 21:30	IO
Chromium	BRL	0.0100		mg/L	233147	1	11/18/2016 21:30	IO
Lead	BRL	0.0100		mg/L	233147	1	11/18/2016 21:30	IO
Selenium	BRL	0.0200		mg/L	233147	1	11/18/2016 21:30	IO
Silver	BRL	0.0100		mg/L	233147	1	11/18/2016 21:30	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-47-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 2:40:00 PM
Lab ID:	1611C79-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
2-Butanone	BRL	50		ug/L	233191	1	11/18/2016 04:05	NP
2-Hexanone	BRL	10		ug/L	233191	1	11/18/2016 04:05	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233191	1	11/18/2016 04:05	NP
Acetone	BRL	50		ug/L	233191	1	11/18/2016 04:05	NP
Benzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Bromodichloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Bromoform	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Bromomethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Carbon disulfide	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Carbon tetrachloride	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Chlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Chloroethane	BRL	10		ug/L	233191	1	11/18/2016 04:05	NP
Chloroform	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Chloromethane	BRL	10		ug/L	233191	1	11/18/2016 04:05	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Cyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Dibromochloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Dichlorodifluoromethane	BRL	10		ug/L	233191	1	11/18/2016 04:05	NP
Ethylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Freon-113	BRL	10		ug/L	233191	1	11/18/2016 04:05	NP
Isopropylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
m,p-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Methyl acetate	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Methylcyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Methylene chloride	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
o-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-47-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 2:40:00 PM
Lab ID:	1611C79-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Tetrachloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Toluene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Trichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:05	NP
Vinyl chloride	BRL	2.0		ug/L	233191	1	11/18/2016 04:05	NP
Surr: 4-Bromofluorobenzene	92.2	66.1-129		%REC	233191	1	11/18/2016 04:05	NP
Surr: Dibromofluoromethane	103	83.6-123		%REC	233191	1	11/18/2016 04:05	NP
Surr: Toluene-d8	101	81.8-118		%REC	233191	1	11/18/2016 04:05	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233130	1	11/18/2016 13:04	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Acenaphthylene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
1-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
2-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Acenaphthene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Fluorene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Phenanthrene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Anthracene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Pyrene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Benz(a)anthracene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Chrysene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Benzo(b)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Benzo(k)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Benzo(a)pyrene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	232885	1	11/21/2016 19:42	RF
Surr: Nitrobenzene-d5	69	56.9-120		%REC	232885	1	11/21/2016 19:42	RF
Surr: 2-Fluorobiphenyl	68.1	55.6-120		%REC	232885	1	11/21/2016 19:42	RF
Surr: 4-Terphenyl-d14	93.8	45.7-120		%REC	232885	1	11/21/2016 19:42	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233147	1	11/18/2016 21:34	IO
Barium	0.0386	0.0200		mg/L	233147	1	11/18/2016 21:34	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-47-4-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 2:40:00 PM
Lab ID:	1611C79-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233147	1	11/18/2016 21:34	IO
Chromium	BRL	0.0100		mg/L	233147	1	11/18/2016 21:34	IO
Lead	BRL	0.0100		mg/L	233147	1	11/18/2016 21:34	IO
Selenium	BRL	0.0200		mg/L	233147	1	11/18/2016 21:34	IO
Silver	BRL	0.0100		mg/L	233147	1	11/18/2016 21:34	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-19-1-2.3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 4:00:00 PM
Lab ID:	1611C79-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
2-Butanone	BRL	50		ug/L	233191	1	11/18/2016 04:28	NP
2-Hexanone	BRL	10		ug/L	233191	1	11/18/2016 04:28	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233191	1	11/18/2016 04:28	NP
Acetone	BRL	50		ug/L	233191	1	11/18/2016 04:28	NP
Benzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Bromodichloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Bromoform	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Bromomethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Carbon disulfide	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Carbon tetrachloride	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Chlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Chloroethane	BRL	10		ug/L	233191	1	11/18/2016 04:28	NP
Chloroform	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Chloromethane	BRL	10		ug/L	233191	1	11/18/2016 04:28	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Cyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Dibromochloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Dichlorodifluoromethane	BRL	10		ug/L	233191	1	11/18/2016 04:28	NP
Ethylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Freon-113	BRL	10		ug/L	233191	1	11/18/2016 04:28	NP
Isopropylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
m,p-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Methyl acetate	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Methylcyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Methylene chloride	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
o-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-19-1-2.3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 4:00:00 PM
Lab ID:	1611C79-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Tetrachloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Toluene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Trichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233191	1	11/18/2016 04:28	NP
Vinyl chloride	BRL	2.0		ug/L	233191	1	11/18/2016 04:28	NP
Surr: 4-Bromofluorobenzene	89.6	66.1-129		%REC	233191	1	11/18/2016 04:28	NP
Surr: Dibromofluoromethane	101	83.6-123		%REC	233191	1	11/18/2016 04:28	NP
Surr: Toluene-d8	100	81.8-118		%REC	233191	1	11/18/2016 04:28	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233130	1	11/18/2016 13:10	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Acenaphthylene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
1-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
2-Methylnaphthalene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Acenaphthene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Fluorene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Phenanthrene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Anthracene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Pyrene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Benz(a)anthracene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Chrysene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Benzo(b)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Benzo(k)fluoranthene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Benzo(a)pyrene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	232885	1	11/21/2016 20:11	RF
Surr: Nitrobenzene-d5	62.3	56.9-120		%REC	232885	1	11/21/2016 20:11	RF
Surr: 2-Fluorobiphenyl	67.2	55.6-120		%REC	232885	1	11/21/2016 20:11	RF
Surr: 4-Terphenyl-d14	94.5	45.7-120		%REC	232885	1	11/21/2016 20:11	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233147	1	11/18/2016 21:38	IO
Barium	0.0513	0.0200		mg/L	233147	1	11/18/2016 21:38	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-19-1-2.3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 4:00:00 PM
Lab ID:	1611C79-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233147	1	11/18/2016 21:38	IO
Chromium	BRL	0.0100		mg/L	233147	1	11/18/2016 21:38	IO
Lead	BRL	0.0100		mg/L	233147	1	11/18/2016 21:38	IO
Selenium	BRL	0.0200		mg/L	233147	1	11/18/2016 21:38	IO
Silver	BRL	0.0100		mg/L	233147	1	11/18/2016 21:38	IO

Qualifiers:

- * Value exceeds maximum contaminant level
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- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-19-1-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 4:00:00 PM
Lab ID:	1611C79-017	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.0892		mg/Kg-dry	232972	1	11/16/2016 15:23	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,1,2,2-Tetrachloroethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,1,2-Trichloroethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,1-Dichloroethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,1-Dichloroethene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,2,4-Trichlorobenzene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,2-Dibromo-3-chloropropane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,2-Dibromoethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,2-Dichlorobenzene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,2-Dichloroethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,2-Dichloropropane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,3-Dichlorobenzene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
1,4-Dichlorobenzene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
2-Butanone	BRL	36		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
2-Hexanone	BRL	7.3		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
4-Methyl-2-pentanone	BRL	7.3		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Acetone	BRL	73		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Benzene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Bromodichloromethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Bromoform	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Bromomethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Carbon disulfide	BRL	7.3		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Carbon tetrachloride	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Chlorobenzene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Chloroethane	BRL	7.3		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Chloroform	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Chloromethane	BRL	7.3		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
cis-1,2-Dichloroethene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
cis-1,3-Dichloropropene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Cyclohexane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Dibromochloromethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Dichlorodifluoromethane	BRL	7.3		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Ethylbenzene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Freon-113	BRL	7.3		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Isopropylbenzene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
m,p-Xylene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Methyl acetate	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Methyl tert-butyl ether	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-19-1-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 4:00:00 PM
Lab ID:	1611C79-017	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Methylene chloride	BRL	15		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
o-Xylene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Styrene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Tetrachloroethene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Toluene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
trans-1,2-Dichloroethene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
trans-1,3-Dichloropropene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Trichloroethene	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Trichlorofluoromethane	BRL	3.6		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Vinyl chloride	BRL	7.3		ug/Kg-dry	233162	1	11/18/2016 03:44	MD
Surr: 4-Bromofluorobenzene	87.9	70-128		%REC	233162	1	11/18/2016 03:44	MD
Surr: Dibromofluoromethane	106	78.2-128		%REC	233162	1	11/18/2016 03:44	MD
Surr: Toluene-d8	95.8	76.5-116		%REC	233162	1	11/18/2016 03:44	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Acenaphthylene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
1-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
2-Methylnaphthalene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Acenaphthene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Fluorene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Phenanthrene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Anthracene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Pyrene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Benz(a)anthracene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Chrysene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Benzo(b)fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Benzo(k)fluoranthene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Benzo(a)pyrene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Dibenz(a,h)anthracene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Benzo(g,h,i)perylene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Indeno(1,2,3-cd)pyrene	BRL	340		ug/Kg-dry	232881	1	11/21/2016 21:38	RF
Surr: 2-Fluorobiphenyl	63.6	56.7-120		%REC	232881	1	11/21/2016 21:38	RF
Surr: 4-Terphenyl-d14	88.6	60-120		%REC	232881	1	11/21/2016 21:38	RF
Surr: Nitrobenzene-d5	54.5	52.6-120		%REC	232881	1	11/21/2016 21:38	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	4.40	3.68		mg/Kg-dry	233239	1	11/18/2016 21:47	JL
Barium	12.2	3.68		mg/Kg-dry	233239	1	11/18/2016 21:47	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-19-1-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 4:00:00 PM
Lab ID:	1611C79-017	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	1.84		mg/Kg-dry	233239	1	11/18/2016 21:47	JL
Chromium	3.54	1.84		mg/Kg-dry	233239	1	11/18/2016 21:47	JL
Lead	BRL	3.68		mg/Kg-dry	233239	1	11/18/2016 21:47	JL
Selenium	BRL	3.68		mg/Kg-dry	233239	1	11/18/2016 21:47	JL
Silver	BRL	1.84		mg/Kg-dry	233239	1	11/18/2016 21:47	JL
PERCENT MOISTURE D2216								
Percent Moisture	2.47	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-26-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/11/2016 5:00:00 PM
Lab ID:	1611C79-018	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.67		ug/Kg-dry	233234	1	11/18/2016 23:21	JE
Toluene	BRL	0.67		ug/Kg-dry	233234	1	11/18/2016 23:21	JE
Ethylbenzene	BRL	0.67		ug/Kg-dry	233234	1	11/18/2016 23:21	JE
m,p-Xylene	BRL	0.67		ug/Kg-dry	233234	1	11/18/2016 23:21	JE
o-Xylene	BRL	0.67		ug/Kg-dry	233234	1	11/18/2016 23:21	JE
Surr: 4-Bromofluorobenzene	74.9	70-128		%REC	233234	1	11/18/2016 23:21	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Acenaphthylene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
1-Methylnaphthalene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
2-Methylnaphthalene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Acenaphthene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Fluorene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Phenanthrene	430	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Anthracene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Fluoranthene	730	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Pyrene	650	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Benz(a)anthracene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Chrysene	910	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Benzo(b)fluoranthene	1100	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Benzo(k)fluoranthene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Benzo(a)pyrene	410	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Dibenz(a,h)anthracene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Benzo(g,h,i)perylene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Indeno(1,2,3-cd)pyrene	BRL	380		ug/Kg-dry	232881	1	11/21/2016 22:07	RF
Surr: 2-Fluorobiphenyl	71.2	56.7-120		%REC	232881	1	11/21/2016 22:07	RF
Surr: 4-Terphenyl-d14	86.8	60-120		%REC	232881	1	11/21/2016 22:07	RF
Surr: Nitrobenzene-d5	66.4	52.6-120		%REC	232881	1	11/21/2016 22:07	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.32		mg/Kg-dry	233234	1	11/17/2016 23:15	JE
Surr: a.a.a-trifluorotoluene	115	69.8-134		%REC	233234	1	11/17/2016 23:15	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	56	7.7		mg/Kg-dry	232806	1	11/15/2016 16:22	RF
Surr: Dioctylphthalate	91	50.1-122		%REC	232806	1	11/15/2016 16:22	RF
PERCENT MOISTURE D2216								
Percent Moisture	13.4	0		wt%	R330288	1	11/18/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016
Lab ID:	1611C79-019	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
2-Butanone	BRL	50		ug/L	233191	1	11/18/2016 00:10	NP
2-Hexanone	BRL	10		ug/L	233191	1	11/18/2016 00:10	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233191	1	11/18/2016 00:10	NP
Acetone	BRL	50		ug/L	233191	1	11/18/2016 00:10	NP
Benzene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Bromodichloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Bromoform	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Bromomethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Carbon disulfide	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Carbon tetrachloride	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Chlorobenzene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Chloroethane	BRL	10		ug/L	233191	1	11/18/2016 00:10	NP
Chloroform	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Chloromethane	BRL	10		ug/L	233191	1	11/18/2016 00:10	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Cyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Dibromochloromethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Dichlorodifluoromethane	BRL	10		ug/L	233191	1	11/18/2016 00:10	NP
Ethylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Freon-113	BRL	10		ug/L	233191	1	11/18/2016 00:10	NP
Isopropylbenzene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
m,p-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Methyl acetate	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Methylcyclohexane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Methylene chloride	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
o-Xylene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016
Lab ID:	1611C79-019	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Tetrachloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Toluene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Trichloroethene	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233191	1	11/18/2016 00:10	NP
Vinyl chloride	BRL	2.0		ug/L	233191	1	11/18/2016 00:10	NP
Surr: 4-Bromofluorobenzene	92.6	66.1-129		%REC	233191	1	11/18/2016 00:10	NP
Surr: Dibromofluoromethane	104	83.6-123		%REC	233191	1	11/18/2016 00:10	NP
Surr: Toluene-d8	99.9	81.8-118		%REC	233191	1	11/18/2016 00:10	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Resolute Work Order Number 1611C79

Checklist completed by Pam Mazzoni 11/12/16
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 2.4° Cooler #2 4.5° Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes __ No ✓

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by PM

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 23-Nov-16

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Lab Order: 1611C79

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611C79-001A	SB-45-4-0-1	11/10/2016 3:15:00PM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-001A	SB-45-4-0-1	11/10/2016 3:15:00PM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-001A	SB-45-4-0-1	11/10/2016 3:15:00PM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-002A	SB-45-3-0-1	11/10/2016 3:55:00PM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-002A	SB-45-3-0-1	11/10/2016 3:55:00PM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-002A	SB-45-3-0-1	11/10/2016 3:55:00PM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-003A	SB-46-2-0-1	11/10/2016 5:30:00PM	Soil	TCL VOLATILE ORGANICS		11/17/2016 9:31:00 AM	11/18/2016
1611C79-003B	SB-46-2-0-1	11/10/2016 5:30:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 10:00:00 AM	11/21/2016
1611C79-003C	SB-46-2-0-1	11/10/2016 5:30:00PM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-003C	SB-46-2-0-1	11/10/2016 5:30:00PM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-003D	SB-46-2-0-1	11/10/2016 5:30:00PM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-004A	SB-45-2-0-1	11/11/2016 8:10:00AM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-004A	SB-45-2-0-1	11/11/2016 8:10:00AM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-004A	SB-45-2-0-1	11/11/2016 8:10:00AM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-005A	SB-45-1-0-1	11/11/2016 8:25:00AM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-005A	SB-45-1-0-1	11/11/2016 8:25:00AM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-005A	SB-45-1-0-1	11/11/2016 8:25:00AM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-006A	SB-46-4-1-2	11/11/2016 9:25:00AM	Soil	TCL VOLATILE ORGANICS		11/17/2016 9:31:00 AM	11/18/2016
1611C79-006B	SB-46-4-1-2	11/11/2016 9:25:00AM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 10:00:00 AM	11/15/2016
1611C79-006C	SB-46-4-1-2	11/11/2016 9:25:00AM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-006C	SB-46-4-1-2	11/11/2016 9:25:00AM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-006D	SB-46-4-1-2	11/11/2016 9:25:00AM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-007A	GW-46-4-8-12	11/11/2016 9:20:00AM	Groundwater	TCL VOLATILE ORGANICS		11/17/2016 5:56:00 PM	11/18/2016
1611C79-007B	GW-46-4-8-12	11/11/2016 9:20:00AM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 9:00:00 AM	11/21/2016
1611C79-007C	GW-46-4-8-12	11/11/2016 9:20:00AM	Groundwater	TOTAL METALS BY ICP		11/18/2016 2:13:00 PM	11/18/2016
1611C79-007C	GW-46-4-8-12	11/11/2016 9:20:00AM	Groundwater	TOTAL MERCURY		11/18/2016 9:48:00 AM	11/18/2016
1611C79-008A	SB-11-0-1	11/11/2016 9:55:00AM	Soil	VOLATILE ORGANICS: BTEX		11/17/2016 3:05:00 PM	11/17/2016
1611C79-008A	SB-11-0-1	11/11/2016 9:55:00AM	Soil	GASOLINE RANGE ORGANICS		11/17/2016 3:05:00 PM	11/17/2016
1611C79-008B	SB-11-0-1	11/11/2016 9:55:00AM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 10:00:00 AM	11/21/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Lab Order: 1611C79

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611C79-008B	SB-11-0-1	11/11/2016 9:55:00AM	Soil	DIESEL RANGE ORGANICS		11/15/2016 9:30:00 AM	11/15/2016
1611C79-008C	SB-11-0-1	11/11/2016 9:55:00AM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-009A	SB-46-1-1-2	11/11/2016 10:20:00AM	Soil	TCL VOLATILE ORGANICS		11/17/2016 9:31:00 AM	11/18/2016
1611C79-009B	SB-46-1-1-2	11/11/2016 10:20:00AM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 10:00:00 AM	11/19/2016
1611C79-009C	SB-46-1-1-2	11/11/2016 10:20:00AM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-009C	SB-46-1-1-2	11/11/2016 10:20:00AM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-009D	SB-46-1-1-2	11/11/2016 10:20:00AM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-010A	SB-46-3-2-3.3	11/11/2016 12:05:00PM	Soil	TCL VOLATILE ORGANICS		11/17/2016 9:31:00 AM	11/18/2016
1611C79-010B	SB-46-3-2-3.3	11/11/2016 12:05:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 10:00:00 AM	11/19/2016
1611C79-010C	SB-46-3-2-3.3	11/11/2016 12:05:00PM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-010C	SB-46-3-2-3.3	11/11/2016 12:05:00PM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-010D	SB-46-3-2-3.3	11/11/2016 12:05:00PM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-011A	SB-47-4-5	11/11/2016 2:40:00PM	Soil	TCL VOLATILE ORGANICS		11/17/2016 9:31:00 AM	11/18/2016
1611C79-011B	SB-47-4-5	11/11/2016 2:40:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 10:00:00 AM	11/19/2016
1611C79-011C	SB-47-4-5	11/11/2016 2:40:00PM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-011C	SB-47-4-5	11/11/2016 2:40:00PM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-011D	SB-47-4-5	11/11/2016 2:40:00PM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-012A	FB-1	11/11/2016 6:20:00PM	Groundwater	TCL VOLATILE ORGANICS		11/17/2016 5:56:00 PM	11/18/2016
1611C79-012A	FB-1	11/11/2016 6:20:00PM	Groundwater	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/18/2016
1611C79-012B	FB-1	11/11/2016 6:20:00PM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 9:00:00 AM	11/21/2016
1611C79-012B	FB-1	11/11/2016 6:20:00PM	Groundwater	DIESEL RANGE ORGANICS		11/15/2016 11:00:00 AM	11/15/2016
1611C79-012C	FB-1	11/11/2016 6:20:00PM	Groundwater	TOTAL METALS BY ICP		11/18/2016 2:13:00 PM	11/18/2016
1611C79-012C	FB-1	11/11/2016 6:20:00PM	Groundwater	TOTAL MERCURY		11/18/2016 9:48:00 AM	11/18/2016
1611C79-013A	RB-1	11/11/2016 6:30:00PM	Groundwater	TCL VOLATILE ORGANICS		11/17/2016 5:56:00 PM	11/18/2016
1611C79-013A	RB-1	11/11/2016 6:30:00PM	Groundwater	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/18/2016
1611C79-013B	RB-1	11/11/2016 6:30:00PM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 9:00:00 AM	11/21/2016
1611C79-013B	RB-1	11/11/2016 6:30:00PM	Groundwater	DIESEL RANGE ORGANICS		11/15/2016 11:00:00 AM	11/15/2016
1611C79-013C	RB-1	11/11/2016 6:30:00PM	Groundwater	TOTAL METALS BY ICP		11/18/2016 2:13:00 PM	11/18/2016
1611C79-013C	RB-1	11/11/2016 6:30:00PM	Groundwater	TOTAL MERCURY		11/18/2016 9:48:00 AM	11/18/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Lab Order: 1611C79

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611C79-014A	GW-DUP-3	11/11/2016 12:00:00AM	Groundwater	TCL VOLATILE ORGANICS		11/17/2016 5:56:00 PM	11/18/2016
1611C79-014B	GW-DUP-3	11/11/2016 12:00:00AM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 9:00:00 AM	11/21/2016
1611C79-014C	GW-DUP-3	11/11/2016 12:00:00AM	Groundwater	TOTAL METALS BY ICP		11/18/2016 2:13:00 PM	11/18/2016
1611C79-014C	GW-DUP-3	11/11/2016 12:00:00AM	Groundwater	TOTAL MERCURY		11/18/2016 9:48:00 AM	11/18/2016
1611C79-015A	GW-47-4-5	11/11/2016 2:40:00PM	Groundwater	TCL VOLATILE ORGANICS		11/17/2016 5:56:00 PM	11/18/2016
1611C79-015B	GW-47-4-5	11/11/2016 2:40:00PM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 9:00:00 AM	11/21/2016
1611C79-015C	GW-47-4-5	11/11/2016 2:40:00PM	Groundwater	TOTAL METALS BY ICP		11/18/2016 2:13:00 PM	11/18/2016
1611C79-015C	GW-47-4-5	11/11/2016 2:40:00PM	Groundwater	TOTAL MERCURY		11/18/2016 9:48:00 AM	11/18/2016
1611C79-016A	GW-19-1-2.3	11/11/2016 4:00:00PM	Groundwater	TCL VOLATILE ORGANICS		11/17/2016 5:56:00 PM	11/18/2016
1611C79-016B	GW-19-1-2.3	11/11/2016 4:00:00PM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 9:00:00 AM	11/21/2016
1611C79-016C	GW-19-1-2.3	11/11/2016 4:00:00PM	Groundwater	TOTAL METALS BY ICP		11/18/2016 2:13:00 PM	11/18/2016
1611C79-016C	GW-19-1-2.3	11/11/2016 4:00:00PM	Groundwater	TOTAL MERCURY		11/18/2016 9:48:00 AM	11/18/2016
1611C79-017A	SB-19-1-2-3	11/11/2016 4:00:00PM	Soil	TCL VOLATILE ORGANICS		11/17/2016 9:31:00 AM	11/18/2016
1611C79-017B	SB-19-1-2-3	11/11/2016 4:00:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 10:00:00 AM	11/21/2016
1611C79-017C	SB-19-1-2-3	11/11/2016 4:00:00PM	Soil	TOTAL METALS BY ICP		11/18/2016 2:47:00 PM	11/18/2016
1611C79-017C	SB-19-1-2-3	11/11/2016 4:00:00PM	Soil	MERCURY		11/16/2016 10:46:00 AM	11/16/2016
1611C79-017D	SB-19-1-2-3	11/11/2016 4:00:00PM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-018A	SB-26-1-2	11/11/2016 5:00:00PM	Soil	VOLATILE ORGANICS: BTEX		11/17/2016 3:05:00 PM	11/18/2016
1611C79-018A	SB-26-1-2	11/11/2016 5:00:00PM	Soil	GASOLINE RANGE ORGANICS		11/17/2016 3:05:00 PM	11/17/2016
1611C79-018B	SB-26-1-2	11/11/2016 5:00:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/15/2016 10:00:00 AM	11/21/2016
1611C79-018B	SB-26-1-2	11/11/2016 5:00:00PM	Soil	DIESEL RANGE ORGANICS		11/15/2016 9:30:00 AM	11/15/2016
1611C79-018C	SB-26-1-2	11/11/2016 5:00:00PM	Soil	PERCENT MOISTURE			11/18/2016
1611C79-019A	TRIP BLANK	11/12/2016 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		11/17/2016 5:56:00 PM	11/18/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232797

Sample ID: **MB-232797**	Client ID:				Units: **mg/L**		Prep Date: **11/14/2016**		Run No: **329862**	
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **232797**		Analysis Date: **11/14/2016**		Seq No: **7167933**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	BRL	0.20									
Surr: Dioctylphthalate	0.07302	0	0.1000		73.0	47	119				

Sample ID: **LCS-232797**	Client ID:				Units: **mg/L**		Prep Date: **11/14/2016**		Run No: **329862**	
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **232797**		Analysis Date: **11/14/2016**		Seq No: **7167934**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	1.050	0.20	1.000		105	51.3	122				
Surr: Dioctylphthalate	0.09516	0	0.1000		95.2	47	119				

Sample ID: **1611A02-003DMS**	Client ID:				Units: **mg/L**		Prep Date: **11/14/2016**		Run No: **329862**	
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **232797**		Analysis Date: **11/14/2016**		Seq No: **7167938**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	0.9226	0.20	1.000	0.1814	74.1	45.2	135				
Surr: Dioctylphthalate	0.06482	0	0.1000		64.8	47	119				

Sample ID: **1611A02-003DMSD**	Client ID:				Units: **mg/L**		Prep Date: **11/14/2016**		Run No: **329862**	
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **232797**		Analysis Date: **11/14/2016**		Seq No: **7167939**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	0.8334	0.20	1.000	0.1814	65.2	45.2	135	0.9226	10.2	26.3	
Surr: Dioctylphthalate	0.07008	0	0.1000		70.1	47	119	0.06482	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232806

Sample ID: **MB-232806**	Client ID:				Units: **mg/Kg**		Prep Date: **11/14/2016**		Run No: **329863**
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **232806**		Analysis Date: **11/14/2016**		Seq No: **7167968**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.681	0	3.300		81.2	50.1	122				

Sample ID: **LCS-232806**	Client ID:				Units: **mg/Kg**		Prep Date: **11/14/2016**		Run No: **329863**
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **232806**		Analysis Date: **11/14/2016**		Seq No: **7167969**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	32.74	6.7	33.30		98.3	56.4	119				
Surr: Dioctylphthalate	2.716	0	3.330		81.6	50.1	122				

Sample ID: **1611C16-003BMS**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **11/14/2016**		Run No: **329863**
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **232806**		Analysis Date: **11/14/2016**		Seq No: **7167976**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	44.19	8.1	40.21	4.083	99.8	43.6	123				
Surr: Dioctylphthalate	3.383	0	4.021		84.1	50.1	122				

Sample ID: **1611C16-003BMSD**	Client ID:				Units: **mg/Kg-dry**		Prep Date: **11/14/2016**		Run No: **329863**
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **232806**		Analysis Date: **11/14/2016**		Seq No: **7167977**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	47.53	8.1	40.21	4.083	108	43.6	123	44.19	7.28	25.7	
Surr: Dioctylphthalate	3.688	0	4.021		91.7	50.1	122	3.383	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232881

Sample ID: **MB-232881** Client ID: Units: **ug/Kg** Prep Date: **11/15/2016** Run No: **329827**
SampleType: **MBLK** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232881** Analysis Date: **11/15/2016** Seq No: **7168524**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	BRL	330									
2-Methylnaphthalene	BRL	330									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Anthracene	BRL	330									
Benz(a)anthracene	BRL	330									
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Chrysene	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Naphthalene	BRL	330									
Phenanthrene	BRL	330									
Pyrene	BRL	330									
Surr: 2-Fluorobiphenyl	1213	0	1667		72.8	56.7	120				
Surr: 4-Terphenyl-d14	1389	0	1667		83.3	60	120				
Surr: Nitrobenzene-d5	1242	0	1667		74.5	52.6	120				

Sample ID: **LCS-232881** Client ID: Units: **ug/Kg** Prep Date: **11/15/2016** Run No: **329827**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232881** Analysis Date: **11/15/2016** Seq No: **7168525**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1284	330	1667		77.1	66.4	120				
2-Methylnaphthalene	1250	330	1667		75.0	64.8	120				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232881

Sample ID: **LCS-232881** Client ID: Units: **ug/Kg** Prep Date: **11/15/2016** Run No: **329827**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232881** Analysis Date: **11/15/2016** Seq No: **7168525**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1361	330	1667		81.6	70.1	120				
Acenaphthylene	1349	330	1667		81.0	68.5	120				
Anthracene	1405	330	1667		84.3	71.7	120				
Benz(a)anthracene	1453	330	1667		87.2	74.9	120				
Benzo(a)pyrene	1447	330	1667		86.8	64.3	120				
Benzo(b)fluoranthene	1616	330	1667		96.9	69.9	120				
Benzo(g,h,i)perylene	1491	330	1667		89.5	70.9	120				
Benzo(k)fluoranthene	1428	330	1667		85.7	67.3	120				
Chrysene	1464	330	1667		87.8	74.1	120				
Dibenz(a,h)anthracene	1440	330	1667		86.4	62.7	120				
Fluoranthene	1468	330	1667		88.1	74.6	120				
Fluorene	1346	330	1667		80.7	72.2	120				
Indeno(1,2,3-cd)pyrene	1469	330	1667		88.1	66.3	120				
Naphthalene	1270	330	1667		76.2	63.5	120				
Phenanthrene	1411	330	1667		84.6	73.5	120				
Pyrene	1452	330	1667		87.1	67.9	120				
Surr: 2-Fluorobiphenyl	1232	0	1667		73.9	56.7	120				
Surr: 4-Terphenyl-d14	1303	0	1667		78.2	60	120				
Surr: Nitrobenzene-d5	1241	0	1667		74.5	52.6	120				

Sample ID: **1611C79-006BMS** Client ID: **SB-46-4-1-2** Units: **ug/Kg-dry** Prep Date: **11/15/2016** Run No: **329827**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232881** Analysis Date: **11/16/2016** Seq No: **7170957**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1314	340	1731		75.9	61.1	120				
2-Methylnaphthalene	1260	340	1731		72.8	57.4	120				
Acenaphthene	1428	340	1731		82.5	60.2	120				
Acenaphthylene	1391	340	1731		80.4	59.9	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232881

Sample ID: **1611C79-006BMS** Client ID: **SB-46-4-1-2** Units: **ug/Kg-dry** Prep Date: **11/15/2016** Run No: **329827**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232881** Analysis Date: **11/16/2016** Seq No: **7170957**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	1463	340	1731		84.5	59.6	120				
Benz(a)anthracene	1564	340	1731		90.4	64.8	120				
Benzo(a)pyrene	1494	340	1731		86.3	56.1	120				
Benzo(b)fluoranthene	1775	340	1731		103	60	126				
Benzo(g,h,i)perylene	1033	340	1731		59.7	56.1	123				
Benzo(k)fluoranthene	1534	340	1731		88.6	55.2	120				
Chrysene	1549	340	1731		89.5	57.9	120				
Dibenz(a,h)anthracene	1127	340	1731		65.1	54.4	119				
Fluoranthene	1553	340	1731		89.7	58.3	119				
Fluorene	1426	340	1731		82.3	61.9	120				
Indeno(1,2,3-cd)pyrene	1128	340	1731		65.2	52.4	124				
Naphthalene	1278	340	1731		73.8	52.7	120				
Phenanthrene	1499	340	1731		86.6	57.7	120				
Pyrene	1517	340	1731		87.6	57.9	120				
Surr: 2-Fluorobiphenyl	1245	0	1731		71.9	56.7	120				
Surr: 4-Terphenyl-d14	1380	0	1731		79.7	60	120				
Surr: Nitrobenzene-d5	1118	0	1731		64.6	52.6	120				

Sample ID: **1611C79-006BMSD** Client ID: **SB-46-4-1-2** Units: **ug/Kg-dry** Prep Date: **11/15/2016** Run No: **329827**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232881** Analysis Date: **11/16/2016** Seq No: **7170958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1393	340	1731		80.5	61.1	120	1314	5.88	20	
2-Methylnaphthalene	1291	340	1731		74.6	57.4	120	1260	2.44	20.9	
Acenaphthene	1471	340	1731		84.9	60.2	120	1428	2.96	22.6	
Acenaphthylene	1434	340	1731		82.8	59.9	120	1391	3.02	26.3	
Anthracene	1550	340	1731		89.5	59.6	120	1463	5.79	24.5	
Benz(a)anthracene	1612	340	1731		93.1	64.8	120	1564	3.03	20.9	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: **232881**

Sample ID: **1611C79-006BMSD** Client ID: **SB-46-4-1-2** Units: **ug/Kg-dry** Prep Date: **11/15/2016** Run No: **329827**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232881** Analysis Date: **11/16/2016** Seq No: **7170958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1580	340	1731		91.3	56.1	120	1494	5.61	21.1	
Benzo(b)fluoranthene	1859	340	1731		107	60	126	1775	4.63	23	
Benzo(g,h,i)perylene	1110	340	1731		64.1	56.1	123	1033	7.14	22.6	
Benzo(k)fluoranthene	1605	340	1731		92.7	55.2	120	1534	4.50	30	
Chrysene	1570	340	1731		90.7	57.9	120	1549	1.35	20.9	
Dibenz(a,h)anthracene	1232	340	1731		71.1	54.4	119	1127	8.90	26.9	
Fluoranthene	1650	340	1731		95.3	58.3	119	1553	6.05	26.6	
Fluorene	1484	340	1731		85.7	61.9	120	1426	4.02	23.8	
Indeno(1,2,3-cd)pyrene	1220	340	1731		70.5	52.4	124	1128	7.81	30.1	
Naphthalene	1317	340	1731		76.1	52.7	120	1278	2.96	22.1	
Phenanthrene	1576	340	1731		91.0	57.7	120	1499	4.98	25.8	
Pyrene	1590	340	1731		91.8	57.9	120	1517	4.66	25.2	
Surr: 2-Fluorobiphenyl	1318	0	1731		76.1	56.7	120	1245	0	0	
Surr: 4-Terphenyl-d14	1438	0	1731		83.1	60	120	1380	0	0	
Surr: Nitrobenzene-d5	1172	0	1731		67.7	52.6	120	1118	0	0	

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232885

Sample ID: **MB-232885** Client ID: Units: **ug/L** Prep Date: **11/15/2016** Run No: **329828**
SampleType: **MBLK** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232885** Analysis Date: **11/15/2016** Seq No: **7168195**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	BRL	10									
2-Methylnaphthalene	BRL	10									
Acenaphthene	BRL	10									
Acenaphthylene	BRL	10									
Anthracene	BRL	10									
Benz(a)anthracene	BRL	10									
Benzo(a)pyrene	BRL	10									
Benzo(b)fluoranthene	BRL	10									
Benzo(g,h,i)perylene	BRL	10									
Benzo(k)fluoranthene	BRL	10									
Chrysene	BRL	10									
Dibenz(a,h)anthracene	BRL	10									
Fluoranthene	BRL	10									
Fluorene	BRL	10									
Indeno(1,2,3-cd)pyrene	BRL	10									
Naphthalene	BRL	10									
Phenanthrene	BRL	10									
Pyrene	BRL	10									
Surr: 2-Fluorobiphenyl	42.21	0	50.00		84.4	55.6	120				
Surr: 4-Terphenyl-d14	39.61	0	50.00		79.2	45.7	120				
Surr: Nitrobenzene-d5	45.42	0	50.00		90.8	56.9	120				

Sample ID: **LCS-232885** Client ID: Units: **ug/L** Prep Date: **11/15/2016** Run No: **329828**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232885** Analysis Date: **11/15/2016** Seq No: **7168523**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	40.57	10	50.00		81.1	67.6	120				
2-Methylnaphthalene	38.76	10	50.00		77.5	65.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232885

Sample ID: **LCS-232885** Client ID: Units: **ug/L** Prep Date: **11/15/2016** Run No: **329828**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232885** Analysis Date: **11/15/2016** Seq No: **7168523**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	43.71	10	50.00		87.4	70	120				
Acenaphthylene	43.31	10	50.00		86.6	70	120				
Anthracene	46.26	10	50.00		92.5	70	120				
Benz(a)anthracene	47.26	10	50.00		94.5	70	117				
Benzo(a)pyrene	48.95	10	50.00		97.9	70	117				
Benzo(b)fluoranthene	52.25	10	50.00		104	70	130				
Benzo(g,h,i)perylene	48.47	10	50.00		96.9	68.6	127				
Benzo(k)fluoranthene	48.08	10	50.00		96.2	70	120				
Chrysene	47.89	10	50.00		95.8	70	120				
Dibenz(a,h)anthracene	47.23	10	50.00		94.5	64.3	123				
Fluoranthene	49.37	10	50.00		98.7	70	120				
Fluorene	43.51	10	50.00		87.0	70	120				
Indeno(1,2,3-cd)pyrene	47.68	10	50.00		95.4	66.5	123				
Naphthalene	39.83	10	50.00		79.7	64.1	120				
Phenanthrene	47.69	10	50.00		95.4	70	120				
Pyrene	47.91	10	50.00		95.8	70	120				
Surr: 2-Fluorobiphenyl	40.64	0	50.00		81.3	55.6	120				
Surr: 4-Terphenyl-d14	44.55	0	50.00		89.1	45.7	120				
Surr: Nitrobenzene-d5	40.41	0	50.00		80.8	56.9	120				

Sample ID: **1611D12-004BMS** Client ID: Units: **ug/L** Prep Date: **11/15/2016** Run No: **329828**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232885** Analysis Date: **11/15/2016** Seq No: **7170967**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	37.89	10	50.00		75.8	57.6	120				
2-Methylnaphthalene	36.53	10	50.00		73.1	52.1	120				
Acenaphthene	43.85	10	50.00		87.7	56.5	119				
Acenaphthylene	41.79	10	50.00		83.6	60.6	120				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232885

Sample ID: **1611D12-004BMS** Client ID: Units: **ug/L** Prep Date: **11/15/2016** Run No: **329828**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232885** Analysis Date: **11/15/2016** Seq No: **7170967**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	41.92	10	50.00		83.8	60	121				
Benz(a)anthracene	45.55	10	50.00		91.1	70.9	122				
Benzo(a)pyrene	40.11	10	50.00		80.2	61.2	122				
Benzo(b)fluoranthene	47.66	10	50.00		95.3	66	133				
Benzo(g,h,i)perylene	45.14	10	50.00		90.3	59	131				
Benzo(k)fluoranthene	44.61	10	50.00		89.2	64	120				
Chrysene	45.09	10	50.00		90.2	70.8	120				
Dibenz(a,h)anthracene	44.30	10	50.00		88.6	55.5	127				
Fluoranthene	46.65	10	50.00		93.3	71.9	121				
Fluorene	43.79	10	50.00		87.6	64.4	118				
Indeno(1,2,3-cd)pyrene	43.55	10	50.00		87.1	58.1	128				
Naphthalene	35.62	10	50.00		71.2	51.3	120				
Phenanthrene	45.01	10	50.00		90.0	70.7	120				
Pyrene	46.64	10	50.00		93.3	60.9	123				
Surr: 2-Fluorobiphenyl	37.59	0	50.00		75.2	55.6	120				
Surr: 4-Terphenyl-d14	42.03	0	50.00		84.1	45.7	120				
Surr: Nitrobenzene-d5	33.10	0	50.00		66.2	56.9	120				

Sample ID: **1611D12-004BMSD** Client ID: Units: **ug/L** Prep Date: **11/15/2016** Run No: **329828**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232885** Analysis Date: **11/15/2016** Seq No: **7170968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	38.65	10	50.00		77.3	57.6	120	37.89	1.99	23.3	
2-Methylnaphthalene	37.22	10	50.00		74.4	52.1	120	36.53	1.87	24	
Acenaphthene	41.95	10	50.00		83.9	56.5	119	43.85	4.43	20.7	
Acenaphthylene	39.86	10	50.00		79.7	60.6	120	41.79	4.73	20.5	
Anthracene	40.85	10	50.00		81.7	60	121	41.92	2.59	22.4	
Benz(a)anthracene	42.29	10	50.00		84.6	70.9	122	45.55	7.42	18.6	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232885

Sample ID: **1611D12-004BMSD** Client ID: Units: **ug/L** Prep Date: **11/15/2016** Run No: **329828**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **232885** Analysis Date: **11/15/2016** Seq No: **7170968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(a)pyrene	37.80	10	50.00		75.6	61.2	122	40.11	5.93	22.2	
Benzo(b)fluoranthene	44.97	10	50.00		89.9	66	133	47.66	5.81	19.3	
Benzo(g,h,i)perylene	41.45	10	50.00		82.9	59	131	45.14	8.52	20.5	
Benzo(k)fluoranthene	42.13	10	50.00		84.3	64	120	44.61	5.72	19.7	
Chrysene	42.58	10	50.00		85.2	70.8	120	45.09	5.73	17.4	
Dibenz(a,h)anthracene	40.26	10	50.00		80.5	55.5	127	44.30	9.56	22.6	
Fluoranthene	44.68	10	50.00		89.4	71.9	121	46.65	4.31	20	
Fluorene	41.18	10	50.00		82.4	64.4	118	43.79	6.14	19.9	
Indeno(1,2,3-cd)pyrene	40.57	10	50.00		81.1	58.1	128	43.55	7.09	20.8	
Naphthalene	38.09	10	50.00		76.2	51.3	120	35.62	6.70	21.5	
Phenanthrene	44.10	10	50.00		88.2	70.7	120	45.01	2.04	20	
Pyrene	44.29	10	50.00		88.6	60.9	123	46.64	5.17	18.6	
Surr: 2-Fluorobiphenyl	38.06	0	50.00		76.1	55.6	120	37.59	0	0	
Surr: 4-Terphenyl-d14	38.92	0	50.00		77.8	45.7	120	42.03	0	0	
Surr: Nitrobenzene-d5	38.61	0	50.00		77.2	56.9	120	33.10	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 232972

Sample ID: **MB-232972**	Client ID:			Units: **mg/Kg**	Prep Date: **11/16/2016**	Run No: **330041**
SampleType: **MBLK**	TestCode: **TOTAL MERCURY SW7471B**			BatchID: **232972**	Analysis Date: **11/16/2016**	Seq No: **7172158**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-232972**	Client ID:			Units: **mg/Kg**	Prep Date: **11/16/2016**	Run No: **330041**
SampleType: **LCS**	TestCode: **TOTAL MERCURY SW7471B**			BatchID: **232972**	Analysis Date: **11/16/2016**	Seq No: **7172159**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3270	0.100	0.4000		81.7	80	120				

Sample ID: **1611C79-002AMS**	Client ID: **SB-45-3-0-1**			Units: **mg/Kg-dry**	Prep Date: **11/16/2016**	Run No: **330041**
SampleType: **MS**	TestCode: **TOTAL MERCURY SW7471B**			BatchID: **232972**	Analysis Date: **11/16/2016**	Seq No: **7172161**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4414	0.0952	0.3808	0.01634	112	70	130				

Sample ID: **1611C79-002AMSD**	Client ID: **SB-45-3-0-1**			Units: **mg/Kg-dry**	Prep Date: **11/16/2016**	Run No: **330041**
SampleType: **MSD**	TestCode: **TOTAL MERCURY SW7471B**			BatchID: **232972**	Analysis Date: **11/16/2016**	Seq No: **7172162**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3906	0.0937	0.3748	0.01634	99.9	70	130	0.4414	12.2	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233054

Sample ID: **MB-233054**	Client ID:				Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330032**
SampleType: **MBLK**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233054**		Analysis Date: **11/16/2016**		Seq No: **7172044**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	BRL	0.50									
Surr: a.a.a-trifluorotoluene	0.05334	0	0.0500		107	75.1	120				

Sample ID: **LCS-233054**	Client ID:				Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330032**
SampleType: **LCS**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233054**		Analysis Date: **11/16/2016**		Seq No: **7173030**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	1.128	0.50	1.000		113	69.9	126				
Surr: a.a.a-trifluorotoluene	0.05322	0	0.0500		106	75.1	120				

Sample ID: **1611A16-019AMS**	Client ID:				Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330032**
SampleType: **MS**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233054**		Analysis Date: **11/16/2016**		Seq No: **7173031**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	1.570	0.50	1.000	0.3421	123	65.8	133				
Surr: a.a.a-trifluorotoluene	0.05871	0	0.0500		117	75.1	120				

Sample ID: **1611A16-019AMSD**	Client ID:				Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330032**
SampleType: **MSD**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233054**		Analysis Date: **11/16/2016**		Seq No: **7173032**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	1.482	0.50	1.000	0.3421	114	65.8	133	1.570	5.76	20	
Surr: a.a.a-trifluorotoluene	0.05413	0	0.0500		108	75.1	120	0.05871	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233130

Sample ID: **MB-233130**	Client ID:				Units: **mg/L**		Prep Date: **11/17/2016**		Run No: **330291**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **233130**		Analysis Date: **11/17/2016**		Seq No: **7179284**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-233130**	Client ID:				Units: **mg/L**		Prep Date: **11/17/2016**		Run No: **330291**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **233130**		Analysis Date: **11/17/2016**		Seq No: **7179285**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004569	0.00020	0.0050		91.4	80	120				

Sample ID: **1611F40-001AMS**	Client ID:				Units: **mg/L**		Prep Date: **11/17/2016**		Run No: **330291**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **233130**		Analysis Date: **11/17/2016**		Seq No: **7179291**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004577	0.00020	0.0050		91.5	70	130				

Sample ID: **1611F40-001AMSD**	Client ID:				Units: **mg/L**		Prep Date: **11/17/2016**		Run No: **330291**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **233130**		Analysis Date: **11/17/2016**		Seq No: **7179293**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004538	0.00020	0.0050		90.8	70	130	0.004577	0.865	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233147

Sample ID: **MB-233147** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330319**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010D** BatchID: **233147** Analysis Date: **11/18/2016** Seq No: **7180190**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Lead	BRL	0.0100									
Selenium	BRL	0.0200									
Silver	BRL	0.0100									

Sample ID: **LCS-233147** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330319**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233147** Analysis Date: **11/18/2016** Seq No: **7180191**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	1.036	0.0500	1.000		104	80	120				
Barium	1.014	0.0200	1.000		101	80	120				
Cadmium	1.060	0.0050	1.000		106	80	120				
Chromium	1.042	0.0100	1.000		104	80	120				
Lead	1.025	0.0100	1.000		102	80	120				
Selenium	1.057	0.0200	1.000		106	80	120				
Silver	0.1026	0.0100	0.1000		103	80	120				

Sample ID: **1611A02-018AMS** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330319**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233147** Analysis Date: **11/18/2016** Seq No: **7180195**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	1.045	0.0500	1.000		105	75	125				
Barium	1.347	0.0200	1.000	0.4122	93.5	75	125				
Cadmium	1.065	0.0050	1.000		106	75	125				
Chromium	1.075	0.0100	1.000	0.05416	102	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233147

Sample ID: **1611A02-018AMS** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330319**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233147** Analysis Date: **11/18/2016** Seq No: **7180195**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	1.025	0.0100	1.000	0.02236	100	75	125				
Selenium	1.072	0.0200	1.000		107	75	125				
Silver	0.1016	0.0100	0.1000		102	75	125				

Sample ID: **1611A02-018AMSD** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330319**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010D** BatchID: **233147** Analysis Date: **11/18/2016** Seq No: **7180196**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	1.027	0.0500	1.000		103	75	125	1.045	1.81	20	
Barium	1.430	0.0200	1.000	0.4122	102	75	125	1.347	5.94	20	
Cadmium	1.059	0.0050	1.000		106	75	125	1.065	0.502	20	
Chromium	1.111	0.0100	1.000	0.05416	106	75	125	1.075	3.27	20	
Lead	1.019	0.0100	1.000	0.02236	99.6	75	125	1.025	0.644	20	
Selenium	1.043	0.0200	1.000		104	75	125	1.072	2.75	20	
Silver	0.1009	0.0100	0.1000		101	75	125	0.1016	0.678	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233162

Sample ID: **MB-233162** Client ID: Units: **ug/Kg** Prep Date: **11/17/2016** Run No: **330124**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233162** Analysis Date: **11/17/2016** Seq No: **7175543**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	100									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	10									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233162

Sample ID: **MB-233162**	Client ID:		Units: **ug/Kg**	Prep Date: **11/17/2016**	Run No: **330124**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233162**	Analysis Date: **11/17/2016**	Seq No: **7175543**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	20									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	10									
Surr: 4-Bromofluorobenzene	48.64	0	50.00		97.3	70	128				
Surr: Dibromofluoromethane	55.15	0	50.00		110	78.2	128				
Surr: Toluene-d8	48.12	0	50.00		96.2	76.5	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233162

Sample ID: **LCS-233162** Client ID: Units: **ug/Kg** Prep Date: **11/17/2016** Run No: **330124**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233162** Analysis Date: **11/17/2016** Seq No: **7175544**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	50.49	5.0	50.00		101	69.9	145				
Benzene	53.78	5.0	50.00		108	72.3	130				
Chlorobenzene	56.66	5.0	50.00		113	69	130				
Toluene	55.92	5.0	50.00		112	71.1	130				
Trichloroethene	55.66	5.0	50.00		111	71.7	136				
Surr: 4-Bromofluorobenzene	46.09	0	50.00		92.2	70	128				
Surr: Dibromofluoromethane	49.45	0	50.00		98.9	78.2	128				
Surr: Toluene-d8	47.13	0	50.00		94.3	76.5	116				

Sample ID: **1611B27-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330211**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233162** Analysis Date: **11/17/2016** Seq No: **7177182**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	46.05	5.7	57.44		80.2	56.6	151				
Benzene	49.31	5.7	57.44		85.8	70.4	130				
Chlorobenzene	49.95	5.7	57.44		87.0	67.5	132				
Toluene	50.80	5.7	57.44		88.4	70.4	130				
Trichloroethene	48.46	5.7	57.44		84.4	70.1	137				
Surr: 4-Bromofluorobenzene	52.92	0	57.44		92.1	70	128				
Surr: Dibromofluoromethane	59.28	0	57.44		103	78.2	128				
Surr: Toluene-d8	54.27	0	57.44		94.5	76.5	116				

Sample ID: **1611B27-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330211**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233162** Analysis Date: **11/17/2016** Seq No: **7177183**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	49.70	5.7	57.44		86.5	56.6	151	46.05	7.63	20.4	
Benzene	51.45	5.7	57.44		89.6	70.4	130	49.31	4.24	16.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233162

Sample ID: **1611B27-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330211**
BatchID: **233162** Analysis Date: **11/17/2016** Seq No: **7177183**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	51.29	5.7	57.44		89.3	67.5	132	49.95	2.63	14.6	
Toluene	51.02	5.7	57.44		88.8	70.4	130	50.80	0.429	16.6	
Trichloroethene	51.89	5.7	57.44		90.3	70.1	137	48.46	6.85	17	
Surr: 4-Bromofluorobenzene	56.17	0	57.44		97.8	70	128	52.92	0	0	
Surr: Dibromofluoromethane	61.27	0	57.44		107	78.2	128	59.28	0	0	
Surr: Toluene-d8	54.64	0	57.44		95.1	76.5	116	54.27	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233191

Sample ID: **MB-233191**	Client ID:		Units: **ug/L**	Prep Date: **11/17/2016**	Run No: **330223**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233191**	Analysis Date: **11/17/2016**	Seq No: **7177555**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233191

Sample ID: **MB-233191**	Client ID:		Units: **ug/L**	Prep Date: **11/17/2016**	Run No: **330223**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233191**	Analysis Date: **11/17/2016**	Seq No: **7177555**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	46.44	0	50.00		92.9	66.1	129				
Surr: Dibromofluoromethane	51.56	0	50.00		103	83.6	123				
Surr: Toluene-d8	49.75	0	50.00		99.5	81.8	118				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233191

Sample ID: **LCS-233191**	Client ID:		Units: **ug/L**	Prep Date: **11/17/2016**	Run No: **330223**
SampleType: **LCS**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233191**	Analysis Date: **11/17/2016**	Seq No: **7177554**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	56.73	5.0	50.00		113	68	139				
Benzene	53.84	5.0	50.00		108	74	125				
Chlorobenzene	51.00	5.0	50.00		102	75.7	123				
Toluene	54.46	5.0	50.00		109	75.9	126				
Trichloroethene	52.80	5.0	50.00		106	70.6	129				
Surr: 4-Bromofluorobenzene	45.81	0	50.00		91.6	66.1	129				
Surr: Dibromofluoromethane	51.17	0	50.00		102	83.6	123				
Surr: Toluene-d8	48.80	0	50.00		97.6	81.8	118				

Sample ID: **1611C80-007AMS**	Client ID:		Units: **ug/L**	Prep Date: **11/17/2016**	Run No: **330223**
SampleType: **MS**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233191**	Analysis Date: **11/18/2016**	Seq No: **7177682**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	28070	2500	25000		112	64.3	149				
Benzene	27490	2500	25000	1140	105	71.6	132				
Chlorobenzene	24890	2500	25000		99.5	73.1	126				
Toluene	57470	2500	25000	31290	105	72.5	135				
Trichloroethene	25950	2500	25000		104	70.2	132				
Surr: 4-Bromofluorobenzene	22650	0	25000		90.6	66.1	129				
Surr: Dibromofluoromethane	25430	0	25000		102	83.6	123				
Surr: Toluene-d8	24920	0	25000		99.7	81.8	118				

Sample ID: **1611C80-007AMSD**	Client ID:		Units: **ug/L**	Prep Date: **11/17/2016**	Run No: **330223**
SampleType: **MSD**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233191**	Analysis Date: **11/18/2016**	Seq No: **7177683**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	26500	2500	25000		106	64.3	149	28070	5.74	30.8	
Benzene	26290	2500	25000	1140	101	71.6	132	27490	4.48	20.7	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233191

Sample ID: **1611C80-007AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/L** Prep Date: **11/17/2016** Run No: **330223**
BatchID: **233191** Analysis Date: **11/18/2016** Seq No: **7177683**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	23990	2500	25000		96.0	73.1	126	24890	3.66	26.6	
Toluene	55760	2500	25000	31290	97.9	72.5	135	57470	3.03	23.2	
Trichloroethene	24890	2500	25000		99.6	70.2	132	25950	4.15	27.7	
Surr: 4-Bromofluorobenzene	23590	0	25000		94.3	66.1	129	22650	0	0	
Surr: Dibromofluoromethane	24920	0	25000		99.7	83.6	123	25430	0	0	
Surr: Toluene-d8	24640	0	25000		98.6	81.8	118	24920	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233234

Sample ID: **MB-233234**	Client ID:				Units: **ug/Kg**		Prep Date: **11/17/2016**		Run No: **330181**	
SampleType: **MBLK**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233234**		Analysis Date: **11/17/2016**		Seq No: **7177881**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
m,p-Xylene	BRL	1.0									
o-Xylene	BRL	1.0									
Toluene	BRL	1.0									
Surr: 4-Bromofluorobenzene	42.29	0	50.00		84.6	70	128				

Sample ID: **MB-233234**	Client ID:				Units: **mg/Kg**		Prep Date: **11/17/2016**		Run No: **330186**	
SampleType: **MBLK**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233234**		Analysis Date: **11/17/2016**		Seq No: **7177962**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	BRL	0.50									
Surr: a.a.a-trifluorotoluene	0.05679	0	0.0500		114	69.8	134				

Sample ID: **LCS-233234**	Client ID:				Units: **ug/Kg**		Prep Date: **11/17/2016**		Run No: **330181**	
SampleType: **LCS**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233234**		Analysis Date: **11/17/2016**		Seq No: **7177889**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.73	1.0	50.00		95.5	72.3	130				
Ethylbenzene	47.05	1.0	50.00		94.1	70.4	130				
m,p-Xylene	95.22	1.0	100.0		95.2	70.1	130				
o-Xylene	47.21	1.0	50.00		94.4	70.1	128				
Toluene	44.42	1.0	50.00		88.8	71.1	130				
Surr: 4-Bromofluorobenzene	42.56	0	50.00		85.1	70	128				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233234

Sample ID: **LCS-233234**	Client ID:		Units: **mg/Kg**	Prep Date: **11/17/2016**	Run No: **330186**
SampleType: **LCS**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**		BatchID: **233234**	Analysis Date: **11/17/2016**	Seq No: **7177966**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	0.8303	0.50	1.000		83.0	68.9	129				
Surr: a.a.a-trifluorotoluene	0.05813	0	0.0500		116	69.8	134				

Sample ID: **1611C79-008AMS**	Client ID: **SB-11-0-1**		Units: **ug/Kg-dry**	Prep Date: **11/17/2016**	Run No: **330181**
SampleType: **MS**	TestCode: **VOLATILE ORGANICS SW8260B**		BatchID: **233234**	Analysis Date: **11/17/2016**	Seq No: **7177891**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	58.62	1.2	60.00		97.7	70.4	130				
Ethylbenzene	55.15	1.2	60.00		91.9	64.9	136				
m,p-Xylene	115.8	1.2	120.0		96.5	60.2	138				
o-Xylene	56.47	1.2	60.00		94.1	61.5	134				
Toluene	56.04	1.2	60.00		93.4	70.4	130				
Surr: 4-Bromofluorobenzene	54.37	0	60.00		90.6	70	128				

Sample ID: **1611C79-008AMS**	Client ID: **SB-11-0-1**		Units: **mg/Kg-dry**	Prep Date: **11/17/2016**	Run No: **330186**
SampleType: **MS**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**		BatchID: **233234**	Analysis Date: **11/17/2016**	Seq No: **7177968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	0.9411	0.60	1.200		78.4	61.1	134				
Surr: a.a.a-trifluorotoluene	0.06789	0	0.0600		113	69.8	134				

Sample ID: **1611C79-008AMSD**	Client ID: **SB-11-0-1**		Units: **ug/Kg-dry**	Prep Date: **11/17/2016**	Run No: **330181**
SampleType: **MSD**	TestCode: **VOLATILE ORGANICS SW8260B**		BatchID: **233234**	Analysis Date: **11/17/2016**	Seq No: **7177892**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	58.27	1.2	60.00		97.1	70.4	130	58.62	0.595	16.9	
Ethylbenzene	53.99	1.2	60.00		90.0	64.9	136	55.15	2.13	16.3	
m,p-Xylene	112.7	1.2	120.0		93.9	60.2	138	115.8	2.73	16.3	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233234

Sample ID: **1611C79-008AMSD**	Client ID: **SB-11-0-1**	Units: **ug/Kg-dry**	Prep Date: **11/17/2016**	Run No: **330181**
SampleType: **MSD**	TestCode: **VOLATILE ORGANICS SW8260B**	BatchID: **233234**	Analysis Date: **11/17/2016**	Seq No: **7177892**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
o-Xylene	56.78	1.2	60.00		94.6	61.5	134	56.47	0.551	16.1	
Toluene	53.17	1.2	60.00		88.6	70.4	130	56.04	5.25	16.6	
Surr: 4-Bromofluorobenzene	56.75	0	60.00		94.6	70	128	54.37	0	0	

Sample ID: **1611C79-008AMSD**	Client ID: **SB-11-0-1**	Units: **mg/Kg-dry**	Prep Date: **11/17/2016**	Run No: **330186**
SampleType: **MSD**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**	BatchID: **233234**	Analysis Date: **11/17/2016**	Seq No: **7177969**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	0.9366	0.60	1.200		78.0	61.1	134	0.9411	0.481	20	
Surr: a.a.a-trifluorotoluene	0.06816	0	0.0600		114	69.8	134	0.06789	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233239

Sample ID: **MB-233239**	Client ID:			Units: **mg/Kg**	Prep Date: **11/18/2016**	Run No: **330360**
SampleType: **MBLK**	TestCode: **METALS, TOTAL**	**SW6010D**		BatchID: **233239**	Analysis Date: **11/18/2016**	Seq No: **7181803**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Cadmium	BRL	2.50									
Chromium	BRL	2.50									
Lead	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									

Sample ID: **LCS-233239**	Client ID:			Units: **mg/Kg**	Prep Date: **11/18/2016**	Run No: **330360**
SampleType: **LCS**	TestCode: **METALS, TOTAL**	**SW6010D**		BatchID: **233239**	Analysis Date: **11/18/2016**	Seq No: **7181804**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	41.16	5.00	50.00		82.3	80	120				
Barium	46.35	5.00	50.00		92.7	80	120				
Cadmium	43.33	2.50	50.00	0.04250	86.6	80	120				
Chromium	46.59	2.50	50.00	0.06450	93.1	80	120				
Lead	44.37	5.00	50.00		88.7	80	120				
Silver	4.460	2.50	5.000		89.2	80	120				

Sample ID: **LCS-233239**	Client ID:			Units: **mg/Kg**	Prep Date: **11/18/2016**	Run No: **330360**
SampleType: **LCS**	TestCode: **METALS, TOTAL**	**SW6010D**		BatchID: **233239**	Analysis Date: **11/21/2016**	Seq No: **7182285**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Selenium	40.28	5.00	50.00		80.6	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611C79

ANALYTICAL QC SUMMARY REPORT

BatchID: 233239

Sample ID: **1611C79-001AMS**	Client ID: **SB-45-4-0-1**			Units: **mg/Kg-dry**	Prep Date: **11/18/2016**	Run No: **330360**
SampleType: **MS**	TestCode: **METALS, TOTAL** **SW6010D**			BatchID: **233239**	Analysis Date: **11/18/2016**	Seq No: **7181808**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	34.58	3.96	39.65	0.3691	86.3	75	125				
Barium	47.93	3.96	39.65	8.457	99.6	75	125				
Cadmium	35.78	1.98	39.65	0.1179	89.9	75	125				
Chromium	41.85	1.98	39.65	3.368	97.1	75	125				
Lead	49.90	3.96	39.65	8.310	105	75	125				
Selenium	28.91	3.96	39.65		72.9	75	125				S
Silver	3.635	1.98	3.965	0.01958	91.2	75	125				

Sample ID: **1611C79-001AMSD**	Client ID: **SB-45-4-0-1**			Units: **mg/Kg-dry**	Prep Date: **11/18/2016**	Run No: **330360**
SampleType: **MSD**	TestCode: **METALS, TOTAL** **SW6010D**			BatchID: **233239**	Analysis Date: **11/18/2016**	Seq No: **7181809**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	33.35	3.85	38.47	0.3691	85.7	75	125	34.58	3.62	20	
Barium	45.70	3.85	38.47	8.457	96.8	75	125	47.93	4.76	20	
Cadmium	35.19	1.92	38.47	0.1179	91.2	75	125	35.78	1.65	20	
Chromium	40.97	1.92	38.47	3.368	97.7	75	125	41.85	2.13	20	
Lead	45.18	3.85	38.47	8.310	95.8	75	125	49.90	9.95	20	
Selenium	28.31	3.85	38.47		73.6	75	125	28.91	2.10	20	S
Silver	3.580	1.92	3.847	0.01958	92.6	75	125	3.635	1.51	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 23, 2016

Michael Patinkin
Resolute Env. & Water Resources Consulting, LLC
1001 Weatherstone Pkwy
Woodstock GA 30188

TEL: (678) 232-9499
FAX: (888) 881-8219

RE: Troutman Sanders Plant Kraft

Dear Michael Patinkin: Order No: 1611D75

Analytical Environmental Services, Inc. received 65 samples on 11/15/2016 10:15:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

CHAIN OF CUSTODY

1611075 PLANT KRAFT
Work Order: PHASE II

Date: 11/13/16 Page 1 of 5

COMPANY: GEORGIA POWER COMPANY	ADDRESS: 241 RALPH MCGILL BLVD ATLANTA, GA 30308
PHONE: 678.232.9499	FAX: —
SAMPLED BY: MICHAEL PATINKIN FORREST HOWARD (FREELANCE)	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	BTEX 8260B	GRO EPA 8015	VOCs EPA 8260B	PAHs EPA 8270C	RCRA 8 METALS (DISSOLVED)	TAL METALS EPA 6010C	DRO EPA 8015	TCLP	PRESERVATION (See codes) S/M+I	S/M+I	S/M+I	NA	NA	NA	N/A	REMARKS	No # of Containers
1	SB-1-0-1	11/12/16	0900	X		SO									X	X						5 COOLERS	4
2	GW-1-0-1		0900	X		GW									X	X							2
3	SB-31-2-1-2		0830	X		SO											X	X	X				6
4	~~SB~~ GW-31-2 ~~-2~~		0830	X		GW											X	X	X				4
5	SB-31-1-1-2		0915	X		SO											X	X	X				6
6	GW-31-1 ~~-2~~		0915	X		GW											X	X	X				4
7	SB-4-2-3		1000	X		SO									X	X		X		X			6
8	SB-5/12-2-3		1040	X		SO									X	X		X		X	X		7
9	GW-5/12		1040	X		GW									X	X		X		X	X		5
10	SB-17-0-2		1615	X		SO											X	X	X				6
11	GW-17		1615	X		GW											X	X	X				4
12	FB-2		1710	X		W										X	X	X	X	X			5
13	RB-2		1720	X		W										X	X	X	X	X			5
14	SB-10-0-1	11/13/16	1120	X		SO									X	X		X		X			6

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1: MICHAEL PATINKIN	11/13/16 1500	1:	11/15/16 10:15AM
2:	11/14/16 1900	2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD:
OUT 11/13/16 VIA: FEDEX
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION

PROJECT NAME: TROUTMAN SANDERS PLANT KRAFT
PROJECT #: —
SITE ADDRESS: 165 CROSSGATE ROAD PORT WENTWORTH, GA
SEND REPORT TO: STEPHEN. WILSON (R) REGULATORY
INVOICE TO: MICHAEL.PATINKIN (R) AESOLUTIONS.COM
(IF DIFFERENT FROM ABOVE) LEA MILLET GEORGIA POWER
QUOTE #: PO#:

RECEIPT

Total # of Containers: 70

Turnaround Time Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other

STATE PROGRAM (if any): GA
E-mail? Fax?
DATA PACKAGE: I (x) II ( ) III ( ) IV ( )

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

CHAIN OF CUSTODY

1611075

Work Order: PHASE II

Date: 11/4/16 (MP) 11/13/16

COMPANY:	ADDRESS:
GEORGIA POWER COMPANY	241 RALPH MCGILL BLVD ATLANTA, GA 30308
PHONE: 678.232.9499	FAX: —
SAMPLED BY: MICHAEL PATRICK, IN FORREST HOWARD (RETURN)	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) S/M+I	H+I	S/M+I	NA	NA	NA	REMARKS	No # of Containers
1	GW-10	11/13/16	1120	X		GW	X	X		X		X	5 COOLERS	4
2	SB-8-0-1	1	1330	X		SO	X	X		X		X		6
3	GW-8		1330	X		GW	X	X		X		X		4
4	SB-7-1-2		1410	X		SO	X	X		X		X		6
5	SB-6-1-2		1553	X		SO	X	X		X		X		6
6	SB-16-5-6		1645	X		SO			X	X	X			6
7	GW-16-5-6		1645	X		GW			X	X	X			4
8	FB-3		1720	X		W		X	X	X	X	X		5
9	RB-3		1730	X		W		X	X	X	X	X		5
10														
11														
12														
13														
14														

ANALYSIS REQUESTED: TCL VOCs 8260B; GRO 8015; VOCs 8260B; TAL's 6020; RUSH TAT; DRO 8015

Visit our website **www.aesatlanta.com** to check on the status of your results, place bottle orders, etc.

MP 11/13/16

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1: MICHAEL PATRICK	11/13/16 1800	1:	11/15/16 10:15AM
2:	11/14/16 900	2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

MP 14 SHIPMENT METHOD:
OUT 11/13/16 VIA: FEDEX
IN / / VIA:
CLIENT (FedEx) UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: TRUITMAN SANDERS PLANT KRAFT
PROJECT #: —
SITE ADDRESS: 155 CREOSOTE ROAD PORT WENTWORTH, GA
SEND REPORT TO: STEPHEN.WILSON@RESOURCE-NV.COM
INVOICE TO: MICHAEL.PATRICK@RESOURCE-NV.COM
(IF DIFFERENT FROM ABOVE) LEA MILLET (GEORGIA POWER)
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers: 46

Turnaround Time Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other _____

STATE PROGRAM (if any): HSRA
E-mail? Fax?
DATA PACKAGE: I (I) II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None White Copy - C

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

1611075 Work Order: PLANT KRAFT PHASE II

Date: 11/14/16 Page 3 of 5

COMPANY: GEORGIA POWER COMPANY

ADDRESS: 241 RALPH MCGILL BLVD ATLANTA, GA

PHONE: 678.232.9499 FAX: —

SAMPLED BY: MICHAEL PATRICK / FORREST HOWARD (RESOLUTE)

SIGNATURE:

ANALYSIS REQUESTED: SVOCs 8270 EDD

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	REMARKS	No # of Containers
	MS 11/14/16						HA		
1	~~SB-51-0-2~~ SB-51-1-0-2	11/14/16	0800	X		SO	X	5 COOLERS	1
2	~~SB-51-2-6~~ SB-51-1-2-6		0802	X		SO	X		1
3	SB-51-2-0-2		0830	X		SO	X		1
4	SB-51-2-2-6		0832	X		SO	X		1
5	SB-51-3-0-2		0900	X		SO	X		1
6	SB-51-3-2-6		0902	X		SO	X		1
7	SB-51-4-0-2		0935	X		SO	X		1
8	SB-51-4-2-6		0937	X		SO	X		1
9	SB-51-4-6-10		0959	X		SO	X		1
10	SB-51-5-0-2		1030	X		SO	X		1
11	SB-51-5-2-6		1032	X		SO	X		1
12	SB-51-5-6-8		1034	X		SO	X		1
13	SB-51-6-0-2		1100	X		SO	X		1
14	SB-51-6-2-6		1102	X		SO	X		1

RELINQUISHED BY:

1: MICHAEL PATRICK 11/14/16 1908

2:

3:

RECEIVED BY:

1: 11/15/16 10:15 AM

2:

3:

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD:

OUT 11/14/16 VIA: FEDEX

IN / / VIA:

CLIENT (FedEx) UPS MAIL COURIER

GREYHOUND OTHER

PROJECT INFORMATION

PROJECT NAME: TROUTMAN SANDERS PLANT KRAFT

PROJECT #: —

SITE ADDRESS: 185 CROSS GATE ROAD FORT WENTWORTH GA

SEND REPORT TO: STEPHEN.WILSON@RESOLUTEFP.COM

INVOICE TO: MICHAEL.PATRICK@RESOLUTEFP.COM

(IF DIFFERENT FROM ABOVE)

LEA MILLET

GEORGIA POWER

QUOTE #: PO#:

RECEIPT

Total # of Containers: 14

Turnaround Time Request

- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other

STATE PROGRAM (if any): HSRA

E-mail? Fax?

DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

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White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

CHAIN OF CUSTODY

1611D75 PLANT KRAFT

Work Order: FINISH IT

Date: 11/14/16 Page 4 of 5

COMPANY:	ADDRESS:
GEORGIA POWER COMPANY	241 RALPH MCGILL BLVD ATLANTA, GA 3037[illegible]
PHONE: 678.732.9499	FAX: —
SAMPLED BY: MICHAEL PATINKIN FORREST HOWARD (REMOTE)	SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) NT	NA	HA	S/M H	SVOCs 8270	RCRA METALS 6010	COPPER 6010	VOCs 8260	REMARKS	No # of Containers
1	SB-51-6-6-8	11/11/16	1104	X		SO	X								5 COOLERS	1
2	SB-51-7-0-2		1130	X		SO	X									1
3	SB-51-7-2-6		1132	X		SO	X									1
4	SB-51-7-6-9		1134	X		SO	X									1
5	SB-36-5-2-3.5		1350	X		SO		X	X							1
6	GW-36-5		1350	X		GW		X	X							1
7	SB-27-2.4-3.7		1425	X		SO				X						4
8	SB-36-6-2-3.5		1450	X		SO		X	X							1
9	GW-~~SB~~-36-6		1450	X		GW		X	X							1
10	SB-36-(-2.5-3.5		1515	X		SO		X	X							1
11	SBDUP1		—	X		SO		X	X							1
12	SB-DUP-3		—	X		SO	X									1
13	SB-DUP-4		—	X		SO	X									1
14	SB-DUP-5		—	X		SO	X									1

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1: MICHAEL PATINKIN	11/14/16 1900	1:	11/15/16 10:15AM
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD:

OUT 11/14/16 VIA: FEDEX

IN / / VIA:

CLIENT (FedEx) UPS MAIL COURIER

GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: TROUTMAN SANDERS PLANT KRAFT

PROJECT #: —

SITE ADDRESS: 155 CROSSGATE ROAD FORT WENTWORTH, GA

SEND REPORT TO: STEPHEN.WILSON@RESOLVEENV.COM

INVOICE TO: (MICHAEL.PATINKIN@RESOLVEENV.COM)

(IF DIFFERENT FROM ABOVE)

LEA MILLET (GEORGIA POWER)

QUOTE #:_____ PO#:_____

RECEIPT

Total # of Containers: 17

Turnaround Time Request

- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other _____

STATE PROGRAM (if any): GA

E-mail? Fax?

DATA PACKAGE: I (x) II ( ) III ( ) IV ( )

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

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PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

1611D75 PLANT K
Work Order: PHASE II

Date: 11/14/16 Page 5 of 5

COMPANY: GEORGIA POWER COMPANY

ADDRESS: 241 RALPH MCGILL BLVD ATLANTA, GA 30308

PHONE: 678. 232. 9490

FAX: —

SAMPLED BY: MICHAEL PATTMAN / FOREST HOWARD

SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	RCRA METALS	COPPER ONLY	GRO 8015	VOCs 8260B	PAHs 8270D	DRO 8015	PRESERVATION (See codes)						REMARKS	No # of Containers
													NA AG	NP HNO3	CP H2SO4	SM H2SO4	NA	NA		
1	SB-36-2-	11/14/16	1340	X		SO	X	X					X	X					5 COOLERS	1
2	GW-36-2-		1340	X		GW	X	X					X	X						1
3	SB-DUP-2M		—	X		SO	X	X					X	X						1
4	GW-DUP-2M		—	X		GW	X	X					X	X						1
5	SB-36-3-2.6-3.6		1615	X		SO	X	X					X	X						1
6	SB-36-4-0-1		1645	X		SO	X	X					X	X						1
7	GW-36-4		1695	X		GW	X	X					X	X						1
8	SB-36-9-0-1		1710	X		SO	X	X					X	X						1
9	FB-4		1800	X		W	X	X	X	X	X	X	X	X	X	X	X	X		5
10	RB-4		1810	X		W	X	X	X	X	X	X	X	X	X	X	X	X		5
11																				
12																				
13																				
14																				

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1: MICHAEL PATTMAN	11/14/16 1900	1:	11/15/16 10:15AM
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD:
OUT 11/14/16 VIA: FEDEX
IN / / VIA:
CLIENT (FedEx) UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: TROUTMAN SANDERS PLANT KENT
PROJECT #: —
SITE ADDRESS: 155 CROSSGATE ROAD PORT WENTWORTH, GA
SEND REPORT TO: STEPHEN.WILSON@RESOLUTEENV.COM
INVOICE TO: MICHAEL.PATTMAN@RESOLUTEENV.COM
(IF DIFFERENT FROM ABOVE) LEA MILLS (GEORGIA POWER)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 18

Turnaround Time Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other

STATE PROGRAM (if any): GA EPD
E-mail? Fax?
DATA PACKAGE: I (II) III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: Resolute Env. & Water Resources Consulting, LLC
Project: Troutman Sanders Plant Kraft
Lab ID: 1611D75

Case Narrative

Sample Receiving Non-conformance:

Five trip blanks were provided for each cooler, but not listed on the Chain of Custody. Trip Blanks were analyzed at no cost to the client.

pH Analysis by Method 9045D/9040C:

Samples for pH analysis by Method 9045D/9040C were received and analyzed outside holding time requirement of "immediate or 15 minutes".

DRO Analysis by Method 8015C:

Matrix spike and matrix spike duplicate analyses were not performed with Batch 233098 due to insufficient sample volume.

Volatile Organic Compounds Analysis by Method 8260B:

Percent recovery for the internal standard compounds Chlorobenzene-d5 and 1,4-Dichlorobenzene-d4 on sample 1611D75-010A was outside control limits biased low due to suspected matrix interference. All other internal standard recoveries were within control limits.

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-1-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 8:00:00 AM
Lab ID:	1611D75-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.70		ug/Kg-dry	233234	1	11/17/2016 23:44	JE
Toluene	BRL	0.70		ug/Kg-dry	233234	1	11/17/2016 23:44	JE
Ethylbenzene	BRL	0.70		ug/Kg-dry	233234	1	11/17/2016 23:44	JE
m,p-Xylene	BRL	0.70		ug/Kg-dry	233234	1	11/17/2016 23:44	JE
o-Xylene	BRL	0.70		ug/Kg-dry	233234	1	11/17/2016 23:44	JE
Surr: 4-Bromofluorobenzene	83.8	70-128		%REC	233234	1	11/17/2016 23:44	JE
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.35		mg/Kg-dry	233234	1	11/17/2016 23:44	JE
Surr: a.a.a-trifluorotoluene	108	69.8-134		%REC	233234	1	11/17/2016 23:44	JE
PERCENT MOISTURE D2216								
Percent Moisture	14.5	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-1-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 8:00:00 AM
Lab ID:	1611D75-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Benzene	BRL	1.0		ug/L	233054	1	11/17/2016 09:08	JE
Toluene	BRL	1.0		ug/L	233054	1	11/17/2016 09:08	JE
Ethylbenzene	BRL	1.0		ug/L	233054	1	11/17/2016 09:08	JE
m,p-Xylene	BRL	1.0		ug/L	233054	1	11/17/2016 09:08	JE
o-Xylene	BRL	1.0		ug/L	233054	1	11/17/2016 09:08	JE
Surr: 4-Bromofluorobenzene	79.8	66.1-129		%REC	233054	1	11/17/2016 09:08	JE
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/17/2016 09:08	JE
Surr: a.a.a-trifluorotoluene	101	75.1-120		%REC	233054	1	11/17/2016 09:08	JE

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-31-2-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 8:30:00 AM
Lab ID:	1611D75-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.103		mg/Kg-dry	232973	1	11/16/2016 15:58	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,1,2,2-Tetrachloroethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,1,2-Trichloroethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,1-Dichloroethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,1-Dichloroethene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,2,4-Trichlorobenzene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,2-Dibromo-3-chloropropane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,2-Dibromoethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,2-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,2-Dichloroethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,2-Dichloropropane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,3-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
1,4-Dichlorobenzene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
2-Butanone	BRL	39		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
2-Hexanone	BRL	7.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
4-Methyl-2-pentanone	BRL	7.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Acetone	BRL	79		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Benzene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Bromodichloromethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Bromoform	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Bromomethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Carbon disulfide	BRL	7.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Carbon tetrachloride	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Chlorobenzene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Chloroethane	BRL	7.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Chloroform	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Chloromethane	BRL	7.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
cis-1,2-Dichloroethene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
cis-1,3-Dichloropropene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Cyclohexane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Dibromochloromethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Dichlorodifluoromethane	BRL	7.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Ethylbenzene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Freon-113	BRL	7.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Isopropylbenzene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
m,p-Xylene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Methyl acetate	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Methyl tert-butyl ether	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
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- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-31-2-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 8:30:00 AM
Lab ID:	1611D75-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Methylene chloride	BRL	16		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
o-Xylene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Styrene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Tetrachloroethene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Toluene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
trans-1,2-Dichloroethene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
trans-1,3-Dichloropropene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Trichloroethene	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Trichlorofluoromethane	BRL	3.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Vinyl chloride	BRL	7.9		ug/Kg-dry	233202	1	11/18/2016 01:04	MD
Surr: 4-Bromofluorobenzene	100	70-128		%REC	233202	1	11/18/2016 01:04	MD
Surr: Dibromofluoromethane	99.3	78.2-128		%REC	233202	1	11/18/2016 01:04	MD
Surr: Toluene-d8	97.2	76.5-116		%REC	233202	1	11/18/2016 01:04	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Acenaphthylene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
1-Methylnaphthalene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
2-Methylnaphthalene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Acenaphthene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Fluorene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Phenanthrene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Anthracene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Fluoranthene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Pyrene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Benz(a)anthracene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Chrysene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Benzo(b)fluoranthene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Benzo(k)fluoranthene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Benzo(a)pyrene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Dibenz(a,h)anthracene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Benzo(g,h,i)perylene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Indeno(1,2,3-cd)pyrene	BRL	340		ug/Kg-dry	233078	1	11/21/2016 22:36	RF
Surr: 2-Fluorobiphenyl	71	56.7-120		%REC	233078	1	11/21/2016 22:36	RF
Surr: 4-Terphenyl-d14	91.4	60-120		%REC	233078	1	11/21/2016 22:36	RF
Surr: Nitrobenzene-d5	72.4	52.6-120		%REC	233078	1	11/21/2016 22:36	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.11		mg/Kg-dry	233240	1	11/21/2016 13:59	IO
Barium	BRL	4.11		mg/Kg-dry	233240	1	11/21/2016 13:59	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-31-2-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 8:30:00 AM
Lab ID:	1611D75-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	2.06		mg/Kg-dry	233240	1	11/21/2016 13:59	IO
Chromium	BRL	2.06		mg/Kg-dry	233240	1	11/21/2016 13:59	IO
Lead	4.58	4.11		mg/Kg-dry	233240	1	11/21/2016 13:59	IO
Selenium	BRL	4.11		mg/Kg-dry	233240	1	11/21/2016 13:59	IO
Silver	BRL	2.06		mg/Kg-dry	233240	1	11/21/2016 13:59	IO
PERCENT MOISTURE D2216								
Percent Moisture	3.21	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-31-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 8:30:00 AM
Lab ID:	1611D75-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 17:01	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 17:01	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 17:01	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 17:01	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 17:01	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 17:01	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 17:01	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 17:01	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
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- B Analyte detected in the associated method blank
- > Greater than Result value
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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-31-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 8:30:00 AM
Lab ID:	1611D75-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:01	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 17:01	NP
Surr: 4-Bromofluorobenzene	88.8	66.1-129		%REC	233243	1	11/18/2016 17:01	NP
Surr: Dibromofluoromethane	101	83.6-123		%REC	233243	1	11/18/2016 17:01	NP
Surr: Toluene-d8	101	81.8-118		%REC	233243	1	11/18/2016 17:01	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 13:49	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 10:59	RF
Surr: Nitrobenzene-d5	66.2	56.9-120		%REC	233025	1	11/22/2016 10:59	RF
Surr: 2-Fluorobiphenyl	65	55.6-120		%REC	233025	1	11/22/2016 10:59	RF
Surr: 4-Terphenyl-d14	89.3	45.7-120		%REC	233025	1	11/22/2016 10:59	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 21:42	IO
Barium	0.0713	0.0200		mg/L	233332	1	11/20/2016 21:42	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-31-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 8:30:00 AM
Lab ID:	1611D75-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 21:42	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 21:42	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 21:42	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 21:42	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 21:42	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-31-1-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 9:15:00 AM
Lab ID:	1611D75-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.104		mg/Kg-dry	232973	1	11/16/2016 16:00	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,1,2,2-Tetrachloroethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,1,2-Trichloroethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,1-Dichloroethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,1-Dichloroethene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,2,4-Trichlorobenzene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,2-Dibromo-3-chloropropane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,2-Dibromoethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,2-Dichlorobenzene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,2-Dichloroethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,2-Dichloropropane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,3-Dichlorobenzene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
1,4-Dichlorobenzene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
2-Butanone	BRL	38		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
2-Hexanone	BRL	7.7		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
4-Methyl-2-pentanone	BRL	7.7		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Acetone	BRL	77		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Benzene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Bromodichloromethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Bromoform	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Bromomethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Carbon disulfide	BRL	7.7		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Carbon tetrachloride	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Chlorobenzene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Chloroethane	BRL	7.7		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Chloroform	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Chloromethane	BRL	7.7		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
cis-1,2-Dichloroethene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
cis-1,3-Dichloropropene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Cyclohexane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Dibromochloromethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Dichlorodifluoromethane	BRL	7.7		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Ethylbenzene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Freon-113	BRL	7.7		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Isopropylbenzene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
m,p-Xylene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Methyl acetate	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Methyl tert-butyl ether	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-31-1-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 9:15:00 AM
Lab ID:	1611D75-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Methylene chloride	BRL	15		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
o-Xylene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Styrene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Tetrachloroethene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Toluene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
trans-1,2-Dichloroethene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
trans-1,3-Dichloropropene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Trichloroethene	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Trichlorofluoromethane	BRL	3.8		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Vinyl chloride	BRL	7.7		ug/Kg-dry	233202	1	11/18/2016 01:29	MD
Surr: 4-Bromofluorobenzene	104	70-128		%REC	233202	1	11/18/2016 01:29	MD
Surr: Dibromofluoromethane	103	78.2-128		%REC	233202	1	11/18/2016 01:29	MD
Surr: Toluene-d8	95.2	76.5-116		%REC	233202	1	11/18/2016 01:29	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Acenaphthylene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
1-Methylnaphthalene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
2-Methylnaphthalene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Acenaphthene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Fluorene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Phenanthrene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Anthracene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Fluoranthene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Pyrene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Benz(a)anthracene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Chrysene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Benzo(b)fluoranthene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Benzo(k)fluoranthene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Benzo(a)pyrene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Dibenz(a,h)anthracene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Benzo(g,h,i)perylene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Indeno(1,2,3-cd)pyrene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:04	RF
Surr: 2-Fluorobiphenyl	71.3	56.7-120		%REC	233078	1	11/21/2016 23:04	RF
Surr: 4-Terphenyl-d14	90.7	60-120		%REC	233078	1	11/21/2016 23:04	RF
Surr: Nitrobenzene-d5	65.9	52.6-120		%REC	233078	1	11/21/2016 23:04	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.37		mg/Kg-dry	233240	1	11/21/2016 14:27	IO
Barium	BRL	4.37		mg/Kg-dry	233240	1	11/21/2016 14:27	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-31-1-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 9:15:00 AM
Lab ID:	1611D75-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	2.18		mg/Kg-dry	233240	1	11/21/2016 14:27	IO
Chromium	BRL	2.18		mg/Kg-dry	233240	1	11/21/2016 14:27	IO
Lead	BRL	4.37		mg/Kg-dry	233240	1	11/21/2016 14:27	IO
Selenium	BRL	4.37		mg/Kg-dry	233240	1	11/21/2016 14:27	IO
Silver	BRL	2.18		mg/Kg-dry	233240	1	11/21/2016 14:27	IO
PERCENT MOISTURE D2216								
Percent Moisture	4.47	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-31-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 9:15:00 AM
Lab ID:	1611D75-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 17:24	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 17:24	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 17:24	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 17:24	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 17:24	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 17:24	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 17:24	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 17:24	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-31-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 9:15:00 AM
Lab ID:	1611D75-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:24	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 17:24	NP
Surr: 4-Bromofluorobenzene	90.1	66.1-129		%REC	233243	1	11/18/2016 17:24	NP
Surr: Dibromofluoromethane	103	83.6-123		%REC	233243	1	11/18/2016 17:24	NP
Surr: Toluene-d8	101	81.8-118		%REC	233243	1	11/18/2016 17:24	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 13:41	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 11:28	RF
Surr: Nitrobenzene-d5	65.1	56.9-120		%REC	233025	1	11/22/2016 11:28	RF
Surr: 2-Fluorobiphenyl	63.4	55.6-120		%REC	233025	1	11/22/2016 11:28	RF
Surr: 4-Terphenyl-d14	87.5	45.7-120		%REC	233025	1	11/22/2016 11:28	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 21:46	IO
Barium	0.0492	0.0200		mg/L	233332	1	11/20/2016 21:46	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-31-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 9:15:00 AM
Lab ID:	1611D75-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 21:46	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 21:46	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 21:46	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 21:46	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 21:46	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-4-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 10:00:00 AM
Lab ID:	1611D75-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.77		ug/Kg-dry	233234	1	11/18/2016 00:13	JE
Toluene	BRL	0.77		ug/Kg-dry	233234	1	11/18/2016 00:13	JE
Ethylbenzene	BRL	0.77		ug/Kg-dry	233234	1	11/18/2016 00:13	JE
m,p-Xylene	BRL	0.77		ug/Kg-dry	233234	1	11/18/2016 00:13	JE
o-Xylene	BRL	0.77		ug/Kg-dry	233234	1	11/18/2016 00:13	JE
Surr: 4-Bromofluorobenzene	75.3	70-128		%REC	233234	1	11/18/2016 00:13	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Acenaphthylene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
1-Methylnaphthalene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
2-Methylnaphthalene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Acenaphthene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Fluorene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Phenanthrene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Anthracene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Fluoranthene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Pyrene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Benz(a)anthracene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Chrysene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Benzo(b)fluoranthene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Benzo(k)fluoranthene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Benzo(a)pyrene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Dibenz(a,h)anthracene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Benzo(g,h,i)perylene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Indeno(1,2,3-cd)pyrene	BRL	350		ug/Kg-dry	233078	1	11/21/2016 23:33	RF
Surr: 2-Fluorobiphenyl	69.3	56.7-120		%REC	233078	1	11/21/2016 23:33	RF
Surr: 4-Terphenyl-d14	89.5	60-120		%REC	233078	1	11/21/2016 23:33	RF
Surr: Nitrobenzene-d5	68.8	52.6-120		%REC	233078	1	11/21/2016 23:33	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.39		mg/Kg-dry	233234	1	11/18/2016 00:13	JE
Surr: a.a.a-trifluorotoluene	110	69.8-134		%REC	233234	1	11/18/2016 00:13	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.1		mg/Kg-dry	232982	1	11/17/2016 11:23	RF
Surr: Dioctylphthalate	82.7	50.1-122		%REC	232982	1	11/17/2016 11:23	RF
PERCENT MOISTURE D2216								
Percent Moisture	5.46	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-5/12-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 10:40:00 AM
Lab ID:	1611D75-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.83		ug/Kg-dry	233234	1	11/18/2016 23:51	JE
Toluene	BRL	0.83		ug/Kg-dry	233234	1	11/18/2016 23:51	JE
Ethylbenzene	BRL	0.83		ug/Kg-dry	233234	1	11/18/2016 23:51	JE
m,p-Xylene	BRL	0.83		ug/Kg-dry	233234	1	11/18/2016 23:51	JE
o-Xylene	BRL	0.83		ug/Kg-dry	233234	1	11/18/2016 23:51	JE
Surr: 4-Bromofluorobenzene	68.1	70-128	S	%REC	233234	1	11/18/2016 23:51	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Acenaphthylene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
1-Methylnaphthalene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
2-Methylnaphthalene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Acenaphthene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Fluorene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Phenanthrene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Anthracene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Pyrene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Benz(a)anthracene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Chrysene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Benzo(a)pyrene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	233172	1	11/18/2016 20:10	RF
Surr: 2-Fluorobiphenyl	75.3	56.7-120		%REC	233172	1	11/18/2016 20:10	RF
Surr: 4-Terphenyl-d14	79.9	60-120		%REC	233172	1	11/18/2016 20:10	RF
Surr: Nitrobenzene-d5	78.3	52.6-120		%REC	233172	1	11/18/2016 20:10	RF
Laboratory Hydrogen Ion (pH) SW9045D				**(SW9045D)**				
pH	6.21	0.01	H	pH Units	233463	1	11/22/2016 10:45	AD
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.39		mg/Kg-dry	233234	1	11/18/2016 00:41	JE
Surr: a.a.a-trifluorotoluene	116	69.8-134		%REC	233234	1	11/18/2016 00:41	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.9		mg/Kg-dry	232982	1	11/17/2016 11:46	RF
Surr: Dioctylphthalate	75.3	50.1-122		%REC	232982	1	11/17/2016 11:46	RF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-5/12-2-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 10:40:00 AM
Lab ID:	1611D75-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PERCENT MOISTURE D2216								
Percent Moisture	15.0	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-5/12
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 10:40:00 AM
Lab ID:	1611D75-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Benzene	BRL	1.0		ug/L	233054	1	11/17/2016 09:38	JE
Toluene	BRL	1.0		ug/L	233054	1	11/17/2016 09:38	JE
Ethylbenzene	BRL	1.0		ug/L	233054	1	11/17/2016 09:38	JE
m,p-Xylene	BRL	1.0		ug/L	233054	1	11/17/2016 09:38	JE
o-Xylene	BRL	1.0		ug/L	233054	1	11/17/2016 09:38	JE
Surr: 4-Bromofluorobenzene	78.1	66.1-129		%REC	233054	1	11/17/2016 09:38	JE
Laboratory Hydrogen Ion (pH) SW9040C								
pH	6.14	0.01	H	pH Units	R330397	1	11/21/2016 16:45	AD
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/17/2016 09:38	JE
Surr: a.a.a-trifluorotoluene	107	75.1-120		%REC	233054	1	11/17/2016 09:38	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/17/2016 18:24	RF
Surr: Dioctylphthalate	34	47-119	S	%REC	233098	1	11/17/2016 18:24	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 12:54	RF
Surr: Nitrobenzene-d5	36.3	56.9-120	S	%REC	233025	1	11/22/2016 12:54	RF
Surr: 2-Fluorobiphenyl	40.3	55.6-120	S	%REC	233025	1	11/22/2016 12:54	RF
Surr: 4-Terphenyl-d14	61.1	45.7-120		%REC	233025	1	11/22/2016 12:54	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-17-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 4:15:00 PM
Lab ID:	1611D75-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.101		mg/Kg-dry	232973	1	11/16/2016 15:34	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,1,2,2-Tetrachloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,1,2-Trichloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,1-Dichloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,1-Dichloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,2,4-Trichlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,2-Dibromo-3-chloropropane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,2-Dibromoethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,2-Dichlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,2-Dichloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,2-Dichloropropane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,3-Dichlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
1,4-Dichlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
2-Butanone	BRL	37		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
2-Hexanone	BRL	7.4		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
4-Methyl-2-pentanone	BRL	7.4		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Acetone	BRL	74		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Benzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Bromodichloromethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Bromoform	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Bromomethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Carbon disulfide	BRL	7.4		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Carbon tetrachloride	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Chlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Chloroethane	BRL	7.4		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Chloroform	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Chloromethane	BRL	7.4		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
cis-1,2-Dichloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
cis-1,3-Dichloropropene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Cyclohexane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Dibromochloromethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Dichlorodifluoromethane	BRL	7.4		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Ethylbenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Freon-113	BRL	7.4		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Isopropylbenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
m,p-Xylene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Methyl acetate	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Methyl tert-butyl ether	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-17-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 4:15:00 PM
Lab ID:	1611D75-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Methylene chloride	BRL	15		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
o-Xylene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Styrene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Tetrachloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Toluene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
trans-1,2-Dichloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
trans-1,3-Dichloropropene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Trichloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Trichlorofluoromethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Vinyl chloride	BRL	7.4		ug/Kg-dry	233202	1	11/18/2016 01:54	MD
Surr: 4-Bromofluorobenzene	65.9	70-128	S	%REC	233202	1	11/18/2016 01:54	MD
Surr: Dibromofluoromethane	117	78.2-128		%REC	233202	1	11/18/2016 01:54	MD
Surr: Toluene-d8	82.1	76.5-116		%REC	233202	1	11/18/2016 01:54	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	600	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Acenaphthylene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
1-Methylnaphthalene	980	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
2-Methylnaphthalene	920	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Acenaphthene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Fluorene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Phenanthrene	1100	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Anthracene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Fluoranthene	890	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Pyrene	760	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Benz(a)anthracene	440	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Chrysene	790	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Benzo(b)fluoranthene	980	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Benzo(k)fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Benzo(a)pyrene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Dibenz(a,h)anthracene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Benzo(g,h,i)perylene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Indeno(1,2,3-cd)pyrene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 00:02	RF
Surr: 2-Fluorobiphenyl	69.8	56.7-120		%REC	233172	1	11/22/2016 00:02	RF
Surr: 4-Terphenyl-d14	89.1	60-120		%REC	233172	1	11/22/2016 00:02	RF
Surr: Nitrobenzene-d5	70.5	52.6-120		%REC	233172	1	11/22/2016 00:02	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	10.0	4.34		mg/Kg-dry	233240	1	11/21/2016 14:31	IO
Barium	32.1	4.34		mg/Kg-dry	233240	1	11/21/2016 14:31	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-17-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 4:15:00 PM
Lab ID:	1611D75-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	2.17		mg/Kg-dry	233240	1	11/21/2016 14:31	IO
Chromium	7.49	2.17		mg/Kg-dry	233240	1	11/21/2016 14:31	IO
Lead	10.8	4.34		mg/Kg-dry	233240	1	11/21/2016 14:31	IO
Selenium	BRL	4.34		mg/Kg-dry	233240	1	11/21/2016 14:31	IO
Silver	BRL	2.17		mg/Kg-dry	233240	1	11/21/2016 14:31	IO
PERCENT MOISTURE D2216								
Percent Moisture	4.71	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-17
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 4:15:00 PM
Lab ID:	1611D75-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 17:47	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 17:47	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 17:47	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 17:47	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 17:47	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 17:47	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 17:47	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 17:47	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-17
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 4:15:00 PM
Lab ID:	1611D75-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 17:47	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 17:47	NP
Surr: 4-Bromofluorobenzene	90.8	66.1-129		%REC	233243	1	11/18/2016 17:47	NP
Surr: Dibromofluoromethane	102	83.6-123		%REC	233243	1	11/18/2016 17:47	NP
Surr: Toluene-d8	101	81.8-118		%REC	233243	1	11/18/2016 17:47	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 13:51	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 13:23	RF
Surr: Nitrobenzene-d5	63.8	56.9-120		%REC	233025	1	11/22/2016 13:23	RF
Surr: 2-Fluorobiphenyl	63.1	55.6-120		%REC	233025	1	11/22/2016 13:23	RF
Surr: 4-Terphenyl-d14	79.3	45.7-120		%REC	233025	1	11/22/2016 13:23	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 21:49	IO
Barium	0.0750	0.0200		mg/L	233332	1	11/20/2016 21:49	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-17
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 4:15:00 PM
Lab ID:	1611D75-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 21:49	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 21:49	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 21:49	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 21:49	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 21:49	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 5:10:00 PM
Lab ID:	1611D75-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 18:10	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 18:10	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 18:10	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 18:10	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 18:10	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 18:10	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 18:10	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 18:10	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 5:10:00 PM
Lab ID:	1611D75-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:10	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 18:10	NP
Surr: 4-Bromofluorobenzene	90.2	66.1-129		%REC	233243	1	11/18/2016 18:10	NP
Surr: Dibromofluoromethane	103	83.6-123		%REC	233243	1	11/18/2016 18:10	NP
Surr: Toluene-d8	102	81.8-118		%REC	233243	1	11/18/2016 18:10	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 13:57	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/17/2016 10:07	JE
Surr: a.a.a-trifluorotoluene	107	75.1-120		%REC	233054	1	11/17/2016 10:07	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/17/2016 18:47	RF
Surr: Dioctylphthalate	58.3	47-119		%REC	233098	1	11/17/2016 18:47	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF

Qualifiers:

- * Value exceeds maximum contaminant level
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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 5:10:00 PM
Lab ID:	1611D75-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 13:51	RF
Surr: Nitrobenzene-d5	72.6	56.9-120		%REC	233025	1	11/22/2016 13:51	RF
Surr: 2-Fluorobiphenyl	64.3	55.6-120		%REC	233025	1	11/22/2016 13:51	RF
Surr: 4-Terphenyl-d14	88.6	45.7-120		%REC	233025	1	11/22/2016 13:51	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:00	IO
Barium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:00	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:00	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:00	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:00	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:00	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:00	IO

Qualifiers:

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- Narr See case narrative
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Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 5:20:00 PM
Lab ID:	1611D75-013	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 18:34	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 18:34	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 18:34	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 18:34	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 18:34	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 18:34	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 18:34	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 18:34	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP

Qualifiers:

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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 5:20:00 PM
Lab ID:	1611D75-013	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:34	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 18:34	NP
Surr: 4-Bromofluorobenzene	89.5	66.1-129		%REC	233243	1	11/18/2016 18:34	NP
Surr: Dibromofluoromethane	101	83.6-123		%REC	233243	1	11/18/2016 18:34	NP
Surr: Toluene-d8	99.6	81.8-118		%REC	233243	1	11/18/2016 18:34	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 13:59	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/17/2016 10:35	JE
Surr: a.a.a-trifluorotoluene	106	75.1-120		%REC	233054	1	11/17/2016 10:35	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/17/2016 19:10	RF
Surr: Dioctylphthalate	58	47-119		%REC	233098	1	11/17/2016 19:10	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF

Qualifiers:

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- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/12/2016 5:20:00 PM
Lab ID:	1611D75-013	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 14:19	RF
Surr: Nitrobenzene-d5	68.9	56.9-120		%REC	233025	1	11/22/2016 14:19	RF
Surr: 2-Fluorobiphenyl	68.5	55.6-120		%REC	233025	1	11/22/2016 14:19	RF
Surr: 4-Terphenyl-d14	83.2	45.7-120		%REC	233025	1	11/22/2016 14:19	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:03	IO
Barium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:03	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:03	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:03	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:03	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:03	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:03	IO

Qualifiers:

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- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-10-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 11:20:00 AM
Lab ID:	1611D75-014	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.92		ug/Kg-dry	233234	1	11/18/2016 01:11	JE
Toluene	BRL	0.92		ug/Kg-dry	233234	1	11/18/2016 01:11	JE
Ethylbenzene	BRL	0.92		ug/Kg-dry	233234	1	11/18/2016 01:11	JE
m,p-Xylene	BRL	0.92		ug/Kg-dry	233234	1	11/18/2016 01:11	JE
o-Xylene	BRL	0.92		ug/Kg-dry	233234	1	11/18/2016 01:11	JE
Surr: 4-Bromofluorobenzene	74.1	70-128		%REC	233234	1	11/18/2016 01:11	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Acenaphthylene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
1-Methylnaphthalene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
2-Methylnaphthalene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Acenaphthene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Fluorene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Phenanthrene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Anthracene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Fluoranthene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Pyrene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Benz(a)anthracene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Chrysene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Benzo(b)fluoranthene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Benzo(k)fluoranthene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Benzo(a)pyrene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Dibenz(a,h)anthracene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Benzo(g,h,i)perylene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Indeno(1,2,3-cd)pyrene	BRL	420		ug/Kg-dry	233172	1	11/22/2016 00:30	RF
Surr: 2-Fluorobiphenyl	63.2	56.7-120		%REC	233172	1	11/22/2016 00:30	RF
Surr: 4-Terphenyl-d14	76.7	60-120		%REC	233172	1	11/22/2016 00:30	RF
Surr: Nitrobenzene-d5	65.4	52.6-120		%REC	233172	1	11/22/2016 00:30	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.46		mg/Kg-dry	233234	1	11/18/2016 01:11	JE
Surr: a.a.a-trifluorotoluene	104	69.8-134		%REC	233234	1	11/18/2016 01:11	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	12	8.6		mg/Kg-dry	232982	1	11/17/2016 14:34	RF
Surr: Dioctylphthalate	77.8	50.1-122		%REC	232982	1	11/17/2016 14:34	RF
PERCENT MOISTURE D2216								
Percent Moisture	21.7	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-10
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 11:20:00 AM
Lab ID:	1611D75-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Benzene	BRL	1.0		ug/L	233054	1	11/17/2016 11:04	JE
Toluene	BRL	1.0		ug/L	233054	1	11/17/2016 11:04	JE
Ethylbenzene	BRL	1.0		ug/L	233054	1	11/17/2016 11:04	JE
m,p-Xylene	BRL	1.0		ug/L	233054	1	11/17/2016 11:04	JE
o-Xylene	BRL	1.0		ug/L	233054	1	11/17/2016 11:04	JE
Surr: 4-Bromofluorobenzene	77	66.1-129		%REC	233054	1	11/17/2016 11:04	JE
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/17/2016 11:04	JE
Surr: a.a.a-trifluorotoluene	108	75.1-120		%REC	233054	1	11/17/2016 11:04	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/17/2016 19:34	RF
Surr: Dioctylphthalate	64.9	47-119		%REC	233098	1	11/17/2016 19:34	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 14:48	RF
Surr: Nitrobenzene-d5	59	56.9-120		%REC	233025	1	11/22/2016 14:48	RF
Surr: 2-Fluorobiphenyl	62	55.6-120		%REC	233025	1	11/22/2016 14:48	RF
Surr: 4-Terphenyl-d14	82.4	45.7-120		%REC	233025	1	11/22/2016 14:48	RF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-8-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 1:30:00 PM
Lab ID:	1611D75-016	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.96		ug/Kg-dry	233234	1	11/18/2016 01:40	JE
Toluene	BRL	0.96		ug/Kg-dry	233234	1	11/18/2016 01:40	JE
Ethylbenzene	BRL	0.96		ug/Kg-dry	233234	1	11/18/2016 01:40	JE
m,p-Xylene	BRL	0.96		ug/Kg-dry	233234	1	11/18/2016 01:40	JE
o-Xylene	BRL	0.96		ug/Kg-dry	233234	1	11/18/2016 01:40	JE
Surr: 4-Bromofluorobenzene	83.1	70-128		%REC	233234	1	11/18/2016 01:40	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Acenaphthylene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
1-Methylnaphthalene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
2-Methylnaphthalene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Acenaphthene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Fluorene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Phenanthrene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Anthracene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Pyrene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Benz(a)anthracene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Chrysene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Benzo(a)pyrene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 00:58	RF
Surr: 2-Fluorobiphenyl	46.2	56.7-120	S	%REC	233172	1	11/22/2016 00:58	RF
Surr: 4-Terphenyl-d14	57.9	60-120	S	%REC	233172	1	11/22/2016 00:58	RF
Surr: Nitrobenzene-d5	42.9	52.6-120	S	%REC	233172	1	11/22/2016 00:58	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.48		mg/Kg-dry	233234	1	11/18/2016 01:40	JE
Surr: a.a.a-trifluorotoluene	115	69.8-134		%REC	233234	1	11/18/2016 01:40	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	1300	80		mg/Kg-dry	232982	10	11/17/2016 14:57	RF
Surr: Dioctylphthalate	69.1	50.1-122		%REC	232982	1	11/17/2016 13:21	RF
PERCENT MOISTURE D2216								
Percent Moisture	16.0	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-8
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 1:30:00 PM
Lab ID:	1611D75-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Benzene	BRL	1.0		ug/L	233054	1	11/17/2016 11:33	JE
Toluene	BRL	1.0		ug/L	233054	1	11/17/2016 11:33	JE
Ethylbenzene	BRL	1.0		ug/L	233054	1	11/17/2016 11:33	JE
m,p-Xylene	BRL	1.0		ug/L	233054	1	11/17/2016 11:33	JE
o-Xylene	BRL	1.0		ug/L	233054	1	11/17/2016 11:33	JE
Surr: 4-Bromofluorobenzene	79.8	66.1-129		%REC	233054	1	11/17/2016 11:33	JE
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/17/2016 11:33	JE
Surr: a.a.a-trifluorotoluene	104	75.1-120		%REC	233054	1	11/17/2016 11:33	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/17/2016 19:57	RF
Surr: Dioctylphthalate	66.2	47-119		%REC	233098	1	11/17/2016 19:57	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 15:16	RF
Surr: Nitrobenzene-d5	58.9	56.9-120		%REC	233025	1	11/22/2016 15:16	RF
Surr: 2-Fluorobiphenyl	62	55.6-120		%REC	233025	1	11/22/2016 15:16	RF
Surr: 4-Terphenyl-d14	82.4	45.7-120		%REC	233025	1	11/22/2016 15:16	RF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-7-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 2:10:00 PM
Lab ID:	1611D75-018	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.78		ug/Kg-dry	233234	1	11/18/2016 02:09	JE
Toluene	BRL	0.78		ug/Kg-dry	233234	1	11/18/2016 02:09	JE
Ethylbenzene	BRL	0.78		ug/Kg-dry	233234	1	11/18/2016 02:09	JE
m,p-Xylene	BRL	0.78		ug/Kg-dry	233234	1	11/18/2016 02:09	JE
o-Xylene	BRL	0.78		ug/Kg-dry	233234	1	11/18/2016 02:09	JE
Surr: 4-Bromofluorobenzene	79.4	70-128		%REC	233234	1	11/18/2016 02:09	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Acenaphthylene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
1-Methylnaphthalene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
2-Methylnaphthalene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Acenaphthene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Fluorene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Phenanthrene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Anthracene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Pyrene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Benz(a)anthracene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Chrysene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Benzo(b)fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Benzo(k)fluoranthene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Benzo(a)pyrene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Dibenz(a,h)anthracene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Benzo(g,h,i)perylene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Indeno(1,2,3-cd)pyrene	BRL	350		ug/Kg-dry	233172	1	11/22/2016 01:25	RF
Surr: 2-Fluorobiphenyl	67.3	56.7-120		%REC	233172	1	11/22/2016 01:25	RF
Surr: 4-Terphenyl-d14	84.9	60-120		%REC	233172	1	11/22/2016 01:25	RF
Surr: Nitrobenzene-d5	66.6	52.6-120		%REC	233172	1	11/22/2016 01:25	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.39		mg/Kg-dry	233234	1	11/18/2016 02:09	JE
Surr: a.a.a-trifluorotoluene	110	69.8-134		%REC	233234	1	11/18/2016 02:09	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.1		mg/Kg-dry	232982	1	11/17/2016 12:11	RF
Surr: Dioctylphthalate	80.6	50.1-122		%REC	232982	1	11/17/2016 12:11	RF
PERCENT MOISTURE D2216								
Percent Moisture	5.24	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-6-1-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 3:55:00 PM
Lab ID:	1611D75-019	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE ORGANICS SW8260B				**(SW5035)**				
Benzene	BRL	0.76		ug/Kg-dry	233234	1	11/18/2016 02:37	JE
Toluene	BRL	0.76		ug/Kg-dry	233234	1	11/18/2016 02:37	JE
Ethylbenzene	BRL	0.76		ug/Kg-dry	233234	1	11/18/2016 02:37	JE
m,p-Xylene	BRL	0.76		ug/Kg-dry	233234	1	11/18/2016 02:37	JE
o-Xylene	BRL	0.76		ug/Kg-dry	233234	1	11/18/2016 02:37	JE
Surr: 4-Bromofluorobenzene	74.7	70-128		%REC	233234	1	11/18/2016 02:37	JE
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Acenaphthylene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
1-Methylnaphthalene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
2-Methylnaphthalene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Acenaphthene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Fluorene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Phenanthrene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Anthracene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Fluoranthene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Pyrene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Benz(a)anthracene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Chrysene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Benzo(b)fluoranthene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Benzo(k)fluoranthene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Benzo(a)pyrene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Dibenz(a,h)anthracene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Benzo(g,h,i)perylene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Indeno(1,2,3-cd)pyrene	BRL	400		ug/Kg-dry	233172	1	11/22/2016 01:54	RF
Surr: 2-Fluorobiphenyl	68.6	56.7-120		%REC	233172	1	11/22/2016 01:54	RF
Surr: 4-Terphenyl-d14	87.9	60-120		%REC	233172	1	11/22/2016 01:54	RF
Surr: Nitrobenzene-d5	67.8	52.6-120		%REC	233172	1	11/22/2016 01:54	RF
GASOLINE RANGE ORGANICS SW8015C				**(SW5035)**				
TPH (Gasoline Range Organics)	BRL	0.38		mg/Kg-dry	233234	1	11/18/2016 02:37	JE
Surr: a.a.a-trifluorotoluene	114	69.8-134		%REC	233234	1	11/18/2016 02:37	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.1		mg/Kg-dry	232982	1	11/17/2016 14:07	RF
Surr: Dioctylphthalate	82.8	50.1-122		%REC	232982	1	11/17/2016 14:07	RF
PERCENT MOISTURE D2216								
Percent Moisture	17.7	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-16-5-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 4:45:00 PM
Lab ID:	1611D75-020	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.116		mg/Kg-dry	232973	1	11/16/2016 16:02	JR
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,1,2,2-Tetrachloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,1,2-Trichloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,1-Dichloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,1-Dichloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,2,4-Trichlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,2-Dibromo-3-chloropropane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,2-Dibromoethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,2-Dichlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,2-Dichloroethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,2-Dichloropropane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,3-Dichlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
1,4-Dichlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
2-Butanone	BRL	37		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
2-Hexanone	BRL	7.3		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
4-Methyl-2-pentanone	BRL	7.3		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Acetone	BRL	73		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Benzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Bromodichloromethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Bromoform	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Bromomethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Carbon disulfide	BRL	7.3		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Carbon tetrachloride	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Chlorobenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Chloroethane	BRL	7.3		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Chloroform	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Chloromethane	BRL	7.3		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
cis-1,2-Dichloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
cis-1,3-Dichloropropene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Cyclohexane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Dibromochloromethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Dichlorodifluoromethane	BRL	7.3		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Ethylbenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Freon-113	BRL	7.3		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Isopropylbenzene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
m,p-Xylene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Methyl acetate	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Methyl tert-butyl ether	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-16-5-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 4:45:00 PM
Lab ID:	1611D75-020	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Methylene chloride	BRL	15		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
o-Xylene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Styrene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Tetrachloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Toluene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
trans-1,2-Dichloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
trans-1,3-Dichloropropene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Trichloroethene	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Trichlorofluoromethane	BRL	3.7		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Vinyl chloride	BRL	7.3		ug/Kg-dry	233202	1	11/18/2016 02:19	MD
Surr: 4-Bromofluorobenzene	95.5	70-128		%REC	233202	1	11/18/2016 02:19	MD
Surr: Dibromofluoromethane	98.7	78.2-128		%REC	233202	1	11/18/2016 02:19	MD
Surr: Toluene-d8	98.6	76.5-116		%REC	233202	1	11/18/2016 02:19	MD
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3550C)**				
Naphthalene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Acenaphthylene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
1-Methylnaphthalene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
2-Methylnaphthalene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Acenaphthene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Fluorene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Phenanthrene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Anthracene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Pyrene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Benz(a)anthracene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Chrysene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Benzo(a)pyrene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	233172	1	11/22/2016 10:30	RF
Surr: 2-Fluorobiphenyl	68.9	56.7-120		%REC	233172	1	11/22/2016 10:30	RF
Surr: 4-Terphenyl-d14	91.9	60-120		%REC	233172	1	11/22/2016 10:30	RF
Surr: Nitrobenzene-d5	70.2	52.6-120		%REC	233172	1	11/22/2016 10:30	RF
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	3.51		mg/Kg-dry	233240	1	11/21/2016 14:35	IO
Barium	11.3	3.51		mg/Kg-dry	233240	1	11/21/2016 14:35	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-16-5-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 4:45:00 PM
Lab ID:	1611D75-020	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3050B)**				
Cadmium	BRL	1.76		mg/Kg-dry	233240	1	11/21/2016 14:35	IO
Chromium	4.59	1.76		mg/Kg-dry	233240	1	11/21/2016 14:35	IO
Lead	BRL	3.51		mg/Kg-dry	233240	1	11/21/2016 14:35	IO
Selenium	BRL	3.51		mg/Kg-dry	233240	1	11/21/2016 14:35	IO
Silver	BRL	1.76		mg/Kg-dry	233240	1	11/21/2016 14:35	IO
PERCENT MOISTURE D2216								
Percent Moisture	14.8	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-16-5-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 4:45:00 PM
Lab ID:	1611D75-021	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 18:58	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 18:58	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 18:58	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 18:58	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 18:58	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 18:58	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 18:58	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 18:58	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-16-5-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 4:45:00 PM
Lab ID:	1611D75-021	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 18:58	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 18:58	NP
Surr: 4-Bromofluorobenzene	89.4	66.1-129		%REC	233243	1	11/18/2016 18:58	NP
Surr: Dibromofluoromethane	102	83.6-123		%REC	233243	1	11/18/2016 18:58	NP
Surr: Toluene-d8	101	81.8-118		%REC	233243	1	11/18/2016 18:58	NP
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:01	JR
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Acenaphthene	33	10		ug/L	233025	1	11/22/2016 15:46	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 15:46	RF
Surr: Nitrobenzene-d5	61.5	56.9-120		%REC	233025	1	11/22/2016 15:46	RF
Surr: 2-Fluorobiphenyl	66.2	55.6-120		%REC	233025	1	11/22/2016 15:46	RF
Surr: 4-Terphenyl-d14	79.2	45.7-120		%REC	233025	1	11/22/2016 15:46	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:06	IO
Barium	0.320	0.0200		mg/L	233332	1	11/20/2016 22:06	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-16-5-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 4:45:00 PM
Lab ID:	1611D75-021	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010D				**(SW3010A)**				
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:06	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:06	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:06	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:06	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:06	IO

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 5:20:00 PM
Lab ID:	1611D75-022	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
2-Butanone	BRL	50		ug/L	233054	1	11/21/2016 13:46	BN
2-Hexanone	BRL	10		ug/L	233054	1	11/21/2016 13:46	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233054	1	11/21/2016 13:46	BN
Acetone	BRL	50		ug/L	233054	1	11/21/2016 13:46	BN
Benzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Bromodichloromethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Bromoform	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Bromomethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Carbon disulfide	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Carbon tetrachloride	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Chlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Chloroethane	BRL	10		ug/L	233054	1	11/21/2016 13:46	BN
Chloroform	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Chloromethane	BRL	10		ug/L	233054	1	11/21/2016 13:46	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Cyclohexane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Dibromochloromethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Dichlorodifluoromethane	BRL	10		ug/L	233054	1	11/21/2016 13:46	BN
Ethylbenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Freon-113	BRL	10		ug/L	233054	1	11/21/2016 13:46	BN
Isopropylbenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
m,p-Xylene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Methyl acetate	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Methylcyclohexane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Methylene chloride	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
o-Xylene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 5:20:00 PM
Lab ID:	1611D75-022	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Tetrachloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Toluene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Trichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:46	BN
Vinyl chloride	BRL	2.0		ug/L	233054	1	11/21/2016 13:46	BN
Surr: 4-Bromofluorobenzene	85.5	66.1-129		%REC	233054	1	11/21/2016 13:46	BN
Surr: Dibromofluoromethane	89.4	83.6-123		%REC	233054	1	11/21/2016 13:46	BN
Surr: Toluene-d8	88.7	81.8-118		%REC	233054	1	11/21/2016 13:46	BN
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:02	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/17/2016 12:04	JE
Surr: a.a.a-trifluorotoluene	109	75.1-120		%REC	233054	1	11/17/2016 12:04	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/17/2016 20:20	RF
Surr: Dioctylphthalate	77.8	47-119		%REC	233098	1	11/17/2016 20:20	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF

Qualifiers:

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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
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Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 5:20:00 PM
Lab ID:	1611D75-022	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 16:15	RF
Surr: Nitrobenzene-d5	59.7	56.9-120		%REC	233025	1	11/22/2016 16:15	RF
Surr: 2-Fluorobiphenyl	63.2	55.6-120		%REC	233025	1	11/22/2016 16:15	RF
Surr: 4-Terphenyl-d14	82	45.7-120		%REC	233025	1	11/22/2016 16:15	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:10	IO
Barium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:10	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:10	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:10	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:10	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:10	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:10	IO

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Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 5:30:00 PM
Lab ID:	1611D75-023	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
2-Butanone	BRL	50		ug/L	233054	1	11/21/2016 13:18	BN
2-Hexanone	BRL	10		ug/L	233054	1	11/21/2016 13:18	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233054	1	11/21/2016 13:18	BN
Acetone	BRL	50		ug/L	233054	1	11/21/2016 13:18	BN
Benzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Bromodichloromethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Bromoform	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Bromomethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Carbon disulfide	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Carbon tetrachloride	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Chlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Chloroethane	BRL	10		ug/L	233054	1	11/21/2016 13:18	BN
Chloroform	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Chloromethane	BRL	10		ug/L	233054	1	11/21/2016 13:18	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Cyclohexane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Dibromochloromethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Dichlorodifluoromethane	BRL	10		ug/L	233054	1	11/21/2016 13:18	BN
Ethylbenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Freon-113	BRL	10		ug/L	233054	1	11/21/2016 13:18	BN
Isopropylbenzene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
m,p-Xylene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Methyl acetate	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Methylcyclohexane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Methylene chloride	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
o-Xylene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN

Qualifiers:

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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 5:30:00 PM
Lab ID:	1611D75-023	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Tetrachloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Toluene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Trichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233054	1	11/21/2016 13:18	BN
Vinyl chloride	BRL	2.0		ug/L	233054	1	11/21/2016 13:18	BN
Surr: 4-Bromofluorobenzene	84.6	66.1-129		%REC	233054	1	11/21/2016 13:18	BN
Surr: Dibromofluoromethane	90.4	83.6-123		%REC	233054	1	11/21/2016 13:18	BN
Surr: Toluene-d8	89	81.8-118		%REC	233054	1	11/21/2016 13:18	BN
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:04	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/17/2016 12:33	JE
Surr: a.a.a-trifluorotoluene	108	75.1-120		%REC	233054	1	11/17/2016 12:33	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/17/2016 20:44	RF
Surr: Dioctylphthalate	68.1	47-119		%REC	233098	1	11/17/2016 20:44	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF

Qualifiers:

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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/13/2016 5:30:00 PM
Lab ID:	1611D75-023	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 16:44	RF
Surr: Nitrobenzene-d5	60.6	56.9-120		%REC	233025	1	11/22/2016 16:44	RF
Surr: 2-Fluorobiphenyl	62	55.6-120		%REC	233025	1	11/22/2016 16:44	RF
Surr: 4-Terphenyl-d14	80.5	45.7-120		%REC	233025	1	11/22/2016 16:44	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:13	IO
Barium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:13	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:13	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:13	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:13	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:13	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:13	IO

Qualifiers:

- * Value exceeds maximum contaminant level
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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-1-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 8:00:00 AM
Lab ID:	1611D75-024	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1´-Biphenyl	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2,4,5-Trichlorophenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2,4,6-Trichlorophenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2,4-Dichlorophenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2,4-Dimethylphenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2,4-Dinitrophenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2,4-Dinitrotoluene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2,6-Dinitrotoluene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2-Chloronaphthalene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2-Chlorophenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2-Methylnaphthalene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2-Methylphenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2-Nitroaniline	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
2-Nitrophenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
3,3´-Dichlorobenzidine	BRL	750		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
3-Nitroaniline	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
4,6-Dinitro-2-methylphenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
4-Bromophenyl phenyl ether	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
4-Chloro-3-methylphenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
4-Chloroaniline	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
4-Chlorophenyl phenyl ether	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
4-Methylphenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
4-Nitroaniline	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
4-Nitrophenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Acenaphthene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Acenaphthylene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Acetophenone	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Anthracene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Atrazine	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Benz(a)anthracene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Benzaldehyde	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Benzo(a)pyrene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Benzo(b)fluoranthene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Benzo(g,h,i)perylene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Benzo(k)fluoranthene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Bis(2-chloroethoxy)methane	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Bis(2-chloroethyl)ether	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Bis(2-chloroisopropyl)ether	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Bis(2-ethylhexyl)phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Butyl benzyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Caprolactam	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-1-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 8:00:00 AM
Lab ID:	1611D75-024	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Chrysene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Di-n-butyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Di-n-octyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Dibenz(a,h)anthracene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Dibenzofuran	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Diethyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Dimethyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Fluoranthene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Fluorene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Hexachlorobenzene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Hexachlorobutadiene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Hexachlorocyclopentadiene	BRL	740		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Hexachloroethane	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Indeno(1,2,3-cd)pyrene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Isophorone	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
N-Nitrosodi-n-propylamine	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
N-Nitrosodiphenylamine	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Naphthalene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Nitrobenzene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Pentachlorophenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Phenanthrene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Phenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Pyrene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 14:03	YH
Surr: 2,4,6-Tribromophenol	85.6	42.4-130		%REC	232963	1	11/18/2016 14:03	YH
Surr: 2-Fluorobiphenyl	87.1	51.5-120		%REC	232963	1	11/18/2016 14:03	YH
Surr: 2-Fluorophenol	74.5	41.1-120		%REC	232963	1	11/18/2016 14:03	YH
Surr: 4-Terphenyl-d14	92.8	52.7-117		%REC	232963	1	11/18/2016 14:03	YH
Surr: Nitrobenzene-d5	75.9	41.4-120		%REC	232963	1	11/18/2016 14:03	YH
Surr: Phenol-d5	79.8	47.6-120		%REC	232963	1	11/18/2016 14:03	YH
PERCENT MOISTURE D2216								
Percent Moisture	11.1	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-1-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 8:02:00 AM
Lab ID:	1611D75-025	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1´-Biphenyl	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2,4,6-Trichlorophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2,4-Dichlorophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2,4-Dimethylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2,4-Dinitrotoluene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2,6-Dinitrotoluene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2-Chloronaphthalene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2-Chlorophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2-Methylnaphthalene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2-Methylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
2-Nitrophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
3,3´-Dichlorobenzidine	BRL	800		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
4-Bromophenyl phenyl ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
4-Chloro-3-methylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
4-Chloroaniline	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
4-Chlorophenyl phenyl ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
4-Methylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Acenaphthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Acenaphthylene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Acetophenone	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Anthracene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Atrazine	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Benz(a)anthracene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Benzaldehyde	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Benzo(a)pyrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Bis(2-chloroethoxy)methane	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Bis(2-chloroethyl)ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Bis(2-chloroisopropyl)ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Bis(2-ethylhexyl)phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Butyl benzyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Caprolactam	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-1-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 8:02:00 AM
Lab ID:	1611D75-025	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Chrysene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Di-n-butyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Di-n-octyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Dibenzofuran	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Diethyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Dimethyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Fluoranthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Fluorene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Hexachlorobenzene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Hexachlorobutadiene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Hexachlorocyclopentadiene	BRL	790		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Hexachloroethane	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Isophorone	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
N-Nitrosodi-n-propylamine	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
N-Nitrosodiphenylamine	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Naphthalene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Nitrobenzene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Phenanthrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Phenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Pyrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 14:31	YH
Surr: 2,4,6-Tribromophenol	81.3	42.4-130		%REC	232963	1	11/18/2016 14:31	YH
Surr: 2-Fluorobiphenyl	77.7	51.5-120		%REC	232963	1	11/18/2016 14:31	YH
Surr: 2-Fluorophenol	71	41.1-120		%REC	232963	1	11/18/2016 14:31	YH
Surr: 4-Terphenyl-d14	91.2	52.7-117		%REC	232963	1	11/18/2016 14:31	YH
Surr: Nitrobenzene-d5	67.4	41.4-120		%REC	232963	1	11/18/2016 14:31	YH
Surr: Phenol-d5	75.2	47.6-120		%REC	232963	1	11/18/2016 14:31	YH
PERCENT MOISTURE D2216								
Percent Moisture	16.0	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-2-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 8:30:00 AM
Lab ID:	1611D75-026	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2,4,6-Trichlorophenol	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2,4-Dichlorophenol	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2,4-Dimethylphenol	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2,4-Dinitrotoluene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2,6-Dinitrotoluene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2-Chloronaphthalene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2-Chlorophenol	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2-Methylnaphthalene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2-Methylphenol	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
2-Nitrophenol	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
3,3′-Dichlorobenzidine	BRL	770		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
4-Bromophenyl phenyl ether	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
4-Chloro-3-methylphenol	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
4-Chloroaniline	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
4-Chlorophenyl phenyl ether	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
4-Methylphenol	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Acenaphthene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Acenaphthylene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Acetophenone	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Anthracene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Atrazine	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Benz(a)anthracene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Benzaldehyde	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Benzo(a)pyrene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Benzo(b)fluoranthene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Benzo(g,h,i)perylene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Benzo(k)fluoranthene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Bis(2-chloroethoxy)methane	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Bis(2-chloroethyl)ether	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Bis(2-chloroisopropyl)ether	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Bis(2-ethylhexyl)phthalate	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Butyl benzyl phthalate	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Caprolactam	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-2-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 8:30:00 AM
Lab ID:	1611D75-026	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Chrysene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Di-n-butyl phthalate	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Di-n-octyl phthalate	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Dibenz(a,h)anthracene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Dibenzofuran	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Diethyl phthalate	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Dimethyl phthalate	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Fluoranthene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Fluorene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Hexachlorobenzene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Hexachlorobutadiene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Hexachlorocyclopentadiene	BRL	760		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Hexachloroethane	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Indeno(1,2,3-cd)pyrene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Isophorone	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
N-Nitrosodi-n-propylamine	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
N-Nitrosodiphenylamine	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Naphthalene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Nitrobenzene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Phenanthrene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Phenol	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Pyrene	BRL	380		ug/Kg-dry	232963	1	11/18/2016 15:01	YH
Surr: 2,4,6-Tribromophenol	86.3	42.4-130		%REC	232963	1	11/18/2016 15:01	YH
Surr: 2-Fluorobiphenyl	87.7	51.5-120		%REC	232963	1	11/18/2016 15:01	YH
Surr: 2-Fluorophenol	79	41.1-120		%REC	232963	1	11/18/2016 15:01	YH
Surr: 4-Terphenyl-d14	92.5	52.7-117		%REC	232963	1	11/18/2016 15:01	YH
Surr: Nitrobenzene-d5	74.3	41.4-120		%REC	232963	1	11/18/2016 15:01	YH
Surr: Phenol-d5	82.5	47.6-120		%REC	232963	1	11/18/2016 15:01	YH
PERCENT MOISTURE D2216								
Percent Moisture	13.2	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-2-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 8:32:00 AM
Lab ID:	1611D75-027	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2,4,6-Trichlorophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2,4-Dichlorophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2,4-Dimethylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2,4-Dinitrotoluene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2,6-Dinitrotoluene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2-Chloronaphthalene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2-Chlorophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2-Methylnaphthalene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2-Methylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
2-Nitrophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
3,3′-Dichlorobenzidine	BRL	800		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
4-Bromophenyl phenyl ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
4-Chloro-3-methylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
4-Chloroaniline	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
4-Chlorophenyl phenyl ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
4-Methylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Acenaphthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Acenaphthylene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Acetophenone	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Anthracene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Atrazine	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Benz(a)anthracene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Benzaldehyde	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Benzo(a)pyrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Bis(2-chloroethoxy)methane	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Bis(2-chloroethyl)ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Bis(2-chloroisopropyl)ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Bis(2-ethylhexyl)phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Butyl benzyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Caprolactam	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-2-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 8:32:00 AM
Lab ID:	1611D75-027	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Chrysene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Di-n-butyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Di-n-octyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Dibenzofuran	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Diethyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Dimethyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Fluoranthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Fluorene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Hexachlorobenzene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Hexachlorobutadiene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Hexachlorocyclopentadiene	BRL	780		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Hexachloroethane	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Isophorone	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
N-Nitrosodi-n-propylamine	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
N-Nitrosodiphenylamine	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Naphthalene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Nitrobenzene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Phenanthrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Phenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Pyrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 15:30	YH
Surr: 2,4,6-Tribromophenol	84.4	42.4-130		%REC	232963	1	11/18/2016 15:30	YH
Surr: 2-Fluorobiphenyl	83.6	51.5-120		%REC	232963	1	11/18/2016 15:30	YH
Surr: 2-Fluorophenol	77.1	41.1-120		%REC	232963	1	11/18/2016 15:30	YH
Surr: 4-Terphenyl-d14	93.2	52.7-117		%REC	232963	1	11/18/2016 15:30	YH
Surr: Nitrobenzene-d5	72.1	41.4-120		%REC	232963	1	11/18/2016 15:30	YH
Surr: Phenol-d5	76.9	47.6-120		%REC	232963	1	11/18/2016 15:30	YH
PERCENT MOISTURE D2216								
Percent Moisture	15.8	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-3-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:00:00 AM
Lab ID:	1611D75-028	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1´-Biphenyl	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2,4,5-Trichlorophenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2,4,6-Trichlorophenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2,4-Dichlorophenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2,4-Dimethylphenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2,4-Dinitrophenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2,4-Dinitrotoluene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2,6-Dinitrotoluene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2-Chloronaphthalene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2-Chlorophenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2-Methylnaphthalene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2-Methylphenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2-Nitroaniline	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
2-Nitrophenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
3,3´-Dichlorobenzidine	BRL	760		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
3-Nitroaniline	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
4,6-Dinitro-2-methylphenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
4-Bromophenyl phenyl ether	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
4-Chloro-3-methylphenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
4-Chloroaniline	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
4-Chlorophenyl phenyl ether	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
4-Methylphenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
4-Nitroaniline	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
4-Nitrophenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Acenaphthene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Acenaphthylene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Acetophenone	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Anthracene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Atrazine	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Benz(a)anthracene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Benzaldehyde	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Benzo(a)pyrene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Benzo(b)fluoranthene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Benzo(g,h,i)perylene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Benzo(k)fluoranthene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Bis(2-chloroethoxy)methane	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Bis(2-chloroethyl)ether	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Bis(2-chloroisopropyl)ether	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Bis(2-ethylhexyl)phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Butyl benzyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Caprolactam	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-3-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:00:00 AM
Lab ID:	1611D75-028	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Chrysene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Di-n-butyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Di-n-octyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Dibenz(a,h)anthracene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Dibenzofuran	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Diethyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Dimethyl phthalate	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Fluoranthene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Fluorene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Hexachlorobenzene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Hexachlorobutadiene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Hexachlorocyclopentadiene	BRL	750		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Hexachloroethane	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Indeno(1,2,3-cd)pyrene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Isophorone	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
N-Nitrosodi-n-propylamine	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
N-Nitrosodiphenylamine	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Naphthalene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Nitrobenzene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Pentachlorophenol	BRL	1900		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Phenanthrene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Phenol	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Pyrene	BRL	370		ug/Kg-dry	232963	1	11/18/2016 15:59	YH
Surr: 2,4,6-Tribromophenol	76.4	42.4-130		%REC	232963	1	11/18/2016 15:59	YH
Surr: 2-Fluorobiphenyl	77.5	51.5-120		%REC	232963	1	11/18/2016 15:59	YH
Surr: 2-Fluorophenol	69.8	41.1-120		%REC	232963	1	11/18/2016 15:59	YH
Surr: 4-Terphenyl-d14	84.7	52.7-117		%REC	232963	1	11/18/2016 15:59	YH
Surr: Nitrobenzene-d5	67.9	41.4-120		%REC	232963	1	11/18/2016 15:59	YH
Surr: Phenol-d5	71.8	47.6-120		%REC	232963	1	11/18/2016 15:59	YH
PERCENT MOISTURE D2216								
Percent Moisture	11.7	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-3-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:02:00 AM
Lab ID:	1611D75-029	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2,4,6-Trichlorophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2,4-Dichlorophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2,4-Dimethylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2,4-Dinitrotoluene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2,6-Dinitrotoluene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2-Chloronaphthalene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2-Chlorophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2-Methylnaphthalene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2-Methylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
2-Nitrophenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
3,3′-Dichlorobenzidine	BRL	790		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
4-Bromophenyl phenyl ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
4-Chloro-3-methylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
4-Chloroaniline	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
4-Chlorophenyl phenyl ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
4-Methylphenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Acenaphthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Acenaphthylene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Acetophenone	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Anthracene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Atrazine	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Benz(a)anthracene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Benzaldehyde	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Benzo(a)pyrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Bis(2-chloroethoxy)methane	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Bis(2-chloroethyl)ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Bis(2-chloroisopropyl)ether	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Bis(2-ethylhexyl)phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Butyl benzyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Caprolactam	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-3-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:02:00 AM
Lab ID:	1611D75-029	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Chrysene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Di-n-butyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Di-n-octyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Dibenzofuran	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Diethyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Dimethyl phthalate	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Fluoranthene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Fluorene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Hexachlorobenzene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Hexachlorobutadiene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Hexachlorocyclopentadiene	BRL	780		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Hexachloroethane	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Isophorone	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
N-Nitrosodi-n-propylamine	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
N-Nitrosodiphenylamine	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Naphthalene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Nitrobenzene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Phenanthrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Phenol	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Pyrene	BRL	390		ug/Kg-dry	232963	1	11/18/2016 17:25	YH
Surr: 2,4,6-Tribromophenol	80.5	42.4-130		%REC	232963	1	11/18/2016 17:25	YH
Surr: 2-Fluorobiphenyl	79.8	51.5-120		%REC	232963	1	11/18/2016 17:25	YH
Surr: 2-Fluorophenol	72.3	41.1-120		%REC	232963	1	11/18/2016 17:25	YH
Surr: 4-Terphenyl-d14	94.3	52.7-117		%REC	232963	1	11/18/2016 17:25	YH
Surr: Nitrobenzene-d5	72.1	41.4-120		%REC	232963	1	11/18/2016 17:25	YH
Surr: Phenol-d5	72.9	47.6-120		%REC	232963	1	11/18/2016 17:25	YH
PERCENT MOISTURE D2216								
Percent Moisture	15.1	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-4-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:35:00 AM
Lab ID:	1611D75-030	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2,4,5-Trichlorophenol	BRL	1900		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2,4,6-Trichlorophenol	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2,4-Dichlorophenol	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2,4-Dimethylphenol	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2,4-Dinitrophenol	BRL	1900		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2,4-Dinitrotoluene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2,6-Dinitrotoluene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2-Chloronaphthalene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2-Chlorophenol	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2-Methylnaphthalene	700	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2-Methylphenol	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2-Nitroaniline	BRL	1900		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
2-Nitrophenol	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
3,3′-Dichlorobenzidine	BRL	760		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
3-Nitroaniline	BRL	1900		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
4,6-Dinitro-2-methylphenol	BRL	1900		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
4-Bromophenyl phenyl ether	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
4-Chloro-3-methylphenol	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
4-Chloroaniline	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
4-Chlorophenyl phenyl ether	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
4-Methylphenol	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
4-Nitroaniline	BRL	1900		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
4-Nitrophenol	BRL	1900		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Acenaphthene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Acenaphthylene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Acetophenone	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Anthracene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Atrazine	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Benz(a)anthracene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Benzaldehyde	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Benzo(a)pyrene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Benzo(b)fluoranthene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Benzo(g,h,i)perylene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Benzo(k)fluoranthene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Bis(2-chloroethoxy)methane	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Bis(2-chloroethyl)ether	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Bis(2-chloroisopropyl)ether	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Bis(2-ethylhexyl)phthalate	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Butyl benzyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Caprolactam	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-4-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:35:00 AM
Lab ID:	1611D75-030	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Chrysene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Di-n-butyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Di-n-octyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Dibenz(a,h)anthracene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Dibenzofuran	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Diethyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Dimethyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Fluoranthene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Fluorene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Hexachlorobenzene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Hexachlorobutadiene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Hexachlorocyclopentadiene	BRL	750		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Hexachloroethane	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Indeno(1,2,3-cd)pyrene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Isophorone	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
N-Nitrosodi-n-propylamine	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
N-Nitrosodiphenylamine	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Naphthalene	440	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Nitrobenzene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Pentachlorophenol	BRL	1900		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Phenanthrene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Phenol	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Pyrene	BRL	370		ug/Kg-dry	233173	1	11/18/2016 19:18	YH
Surr: 2,4,6-Tribromophenol	68.6	42.4-130		%REC	233173	1	11/18/2016 19:18	YH
Surr: 2-Fluorobiphenyl	69.8	51.5-120		%REC	233173	1	11/18/2016 19:18	YH
Surr: 2-Fluorophenol	58.9	41.1-120		%REC	233173	1	11/18/2016 19:18	YH
Surr: 4-Terphenyl-d14	72.6	52.7-117		%REC	233173	1	11/18/2016 19:18	YH
Surr: Nitrobenzene-d5	58.4	41.4-120		%REC	233173	1	11/18/2016 19:18	YH
Surr: Phenol-d5	61.8	47.6-120		%REC	233173	1	11/18/2016 19:18	YH
PERCENT MOISTURE D2216								
Percent Moisture	11.9	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-4-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:37:00 AM
Lab ID:	1611D75-031	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1´-Biphenyl	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2,4,5-Trichlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2,4,6-Trichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2,4-Dichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2,4-Dimethylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2,4-Dinitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2,4-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2,6-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2-Chloronaphthalene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2-Chlorophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2-Methylnaphthalene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
2-Nitrophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
3,3´-Dichlorobenzidine	BRL	810		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
3-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
4,6-Dinitro-2-methylphenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
4-Bromophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
4-Chloro-3-methylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
4-Chloroaniline	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
4-Chlorophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
4-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
4-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
4-Nitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Acenaphthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Acenaphthylene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Acetophenone	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Anthracene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Atrazine	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Benz(a)anthracene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Benzaldehyde	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Benzo(a)pyrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Benzo(b)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Benzo(g,h,i)perylene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Benzo(k)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Bis(2-chloroethoxy)methane	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Bis(2-chloroethyl)ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Bis(2-chloroisopropyl)ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Bis(2-ethylhexyl)phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Butyl benzyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Caprolactam	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-4-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:37:00 AM
Lab ID:	1611D75-031	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Chrysene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Di-n-butyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Di-n-octyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Dibenz(a,h)anthracene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Dibenzofuran	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Diethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Dimethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Fluorene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Hexachlorobenzene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Hexachlorobutadiene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Hexachlorocyclopentadiene	BRL	800		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Hexachloroethane	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Indeno(1,2,3-cd)pyrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Isophorone	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
N-Nitrosodi-n-propylamine	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
N-Nitrosodiphenylamine	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Naphthalene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Nitrobenzene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Pentachlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Phenanthrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Phenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Pyrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 19:47	YH
Surr: 2,4,6-Tribromophenol	74.3	42.4-130		%REC	233173	1	11/18/2016 19:47	YH
Surr: 2-Fluorobiphenyl	72.4	51.5-120		%REC	233173	1	11/18/2016 19:47	YH
Surr: 2-Fluorophenol	61.6	41.1-120		%REC	233173	1	11/18/2016 19:47	YH
Surr: 4-Terphenyl-d14	78.3	52.7-117		%REC	233173	1	11/18/2016 19:47	YH
Surr: Nitrobenzene-d5	62.2	41.4-120		%REC	233173	1	11/18/2016 19:47	YH
Surr: Phenol-d5	62.4	47.6-120		%REC	233173	1	11/18/2016 19:47	YH
PERCENT MOISTURE D2216								
Percent Moisture	17.3	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-4-6-10
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:39:00 AM
Lab ID:	1611D75-032	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2,4,5-Trichlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2,4,6-Trichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2,4-Dichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2,4-Dimethylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2,4-Dinitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2,4-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2,6-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2-Chloronaphthalene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2-Chlorophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2-Methylnaphthalene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
2-Nitrophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
3,3′-Dichlorobenzidine	BRL	810		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
3-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
4,6-Dinitro-2-methylphenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
4-Bromophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
4-Chloro-3-methylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
4-Chloroaniline	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
4-Chlorophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
4-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
4-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
4-Nitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Acenaphthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Acenaphthylene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Acetophenone	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Anthracene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Atrazine	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Benz(a)anthracene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Benzaldehyde	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Benzo(a)pyrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Benzo(b)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Benzo(g,h,i)perylene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Benzo(k)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Bis(2-chloroethoxy)methane	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Bis(2-chloroethyl)ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Bis(2-chloroisopropyl)ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Bis(2-ethylhexyl)phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Butyl benzyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Caprolactam	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-4-6-10
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 9:39:00 AM
Lab ID:	1611D75-032	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Chrysene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Di-n-butyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Di-n-octyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Dibenz(a,h)anthracene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Dibenzofuran	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Diethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Dimethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Fluorene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Hexachlorobenzene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Hexachlorobutadiene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Hexachlorocyclopentadiene	BRL	800		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Hexachloroethane	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Indeno(1,2,3-cd)pyrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Isophorone	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
N-Nitrosodi-n-propylamine	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
N-Nitrosodiphenylamine	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Naphthalene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Nitrobenzene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Pentachlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Phenanthrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Phenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Pyrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:16	YH
Surr: 2,4,6-Tribromophenol	80.2	42.4-130		%REC	233173	1	11/18/2016 20:16	YH
Surr: 2-Fluorobiphenyl	82.5	51.5-120		%REC	233173	1	11/18/2016 20:16	YH
Surr: 2-Fluorophenol	76.2	41.1-120		%REC	233173	1	11/18/2016 20:16	YH
Surr: 4-Terphenyl-d14	87.1	52.7-117		%REC	233173	1	11/18/2016 20:16	YH
Surr: Nitrobenzene-d5	72.1	41.4-120		%REC	233173	1	11/18/2016 20:16	YH
Surr: Phenol-d5	77.7	47.6-120		%REC	233173	1	11/18/2016 20:16	YH
PERCENT MOISTURE D2216								
Percent Moisture	17.6	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-5-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 10:30:00 AM
Lab ID:	1611D75-033	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2,4,5-Trichlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2,4,6-Trichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2,4-Dichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2,4-Dimethylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2,4-Dinitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2,4-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2,6-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2-Chloronaphthalene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2-Chlorophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2-Methylnaphthalene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
2-Nitrophenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
3,3′-Dichlorobenzidine	BRL	820		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
3-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
4,6-Dinitro-2-methylphenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
4-Bromophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
4-Chloro-3-methylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
4-Chloroaniline	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
4-Chlorophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
4-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
4-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
4-Nitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Acenaphthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Acenaphthylene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Acetophenone	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Anthracene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Atrazine	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Benz(a)anthracene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Benzaldehyde	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Benzo(a)pyrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Benzo(b)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Benzo(g,h,i)perylene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Benzo(k)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Bis(2-chloroethoxy)methane	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Bis(2-chloroethyl)ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Bis(2-chloroisopropyl)ether	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Bis(2-ethylhexyl)phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Butyl benzyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Caprolactam	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-5-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 10:30:00 AM
Lab ID:	1611D75-033	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Chrysene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Di-n-butyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Di-n-octyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Dibenz(a,h)anthracene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Dibenzofuran	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Diethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Dimethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Fluorene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Hexachlorobenzene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Hexachlorobutadiene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Hexachlorocyclopentadiene	BRL	810		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Hexachloroethane	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Indeno(1,2,3-cd)pyrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Isophorone	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
N-Nitrosodi-n-propylamine	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
N-Nitrosodiphenylamine	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Naphthalene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Nitrobenzene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Pentachlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Phenanthrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Phenol	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Pyrene	BRL	400		ug/Kg-dry	233173	1	11/18/2016 20:44	YH
Surr: 2,4,6-Tribromophenol	51.8	42.4-130		%REC	233173	1	11/18/2016 20:44	YH
Surr: 2-Fluorobiphenyl	74.2	51.5-120		%REC	233173	1	11/18/2016 20:44	YH
Surr: 2-Fluorophenol	45.2	41.1-120		%REC	233173	1	11/18/2016 20:44	YH
Surr: 4-Terphenyl-d14	81.7	52.7-117		%REC	233173	1	11/18/2016 20:44	YH
Surr: Nitrobenzene-d5	64.7	41.4-120		%REC	233173	1	11/18/2016 20:44	YH
Surr: Phenol-d5	55	47.6-120		%REC	233173	1	11/18/2016 20:44	YH
PERCENT MOISTURE D2216								
Percent Moisture	18.0	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-5-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 10:32:00 AM
Lab ID:	1611D75-034	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2,4,6-Trichlorophenol	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2,4-Dichlorophenol	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2,4-Dimethylphenol	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2,4-Dinitrotoluene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2,6-Dinitrotoluene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2-Chloronaphthalene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2-Chlorophenol	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2-Methylnaphthalene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2-Methylphenol	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
2-Nitrophenol	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
3,3′-Dichlorobenzidine	BRL	780		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
4-Bromophenyl phenyl ether	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
4-Chloro-3-methylphenol	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
4-Chloroaniline	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
4-Chlorophenyl phenyl ether	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
4-Methylphenol	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Acenaphthene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Acenaphthylene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Acetophenone	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Anthracene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Atrazine	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Benz(a)anthracene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Benzaldehyde	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Benzo(a)pyrene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Benzo(b)fluoranthene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Benzo(g,h,i)perylene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Benzo(k)fluoranthene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Bis(2-chloroethoxy)methane	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Bis(2-chloroethyl)ether	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Bis(2-chloroisopropyl)ether	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Bis(2-ethylhexyl)phthalate	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Butyl benzyl phthalate	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Caprolactam	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-5-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 10:32:00 AM
Lab ID:	1611D75-034	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Chrysene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Di-n-butyl phthalate	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Di-n-octyl phthalate	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Dibenz(a,h)anthracene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Dibenzofuran	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Diethyl phthalate	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Dimethyl phthalate	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Fluoranthene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Fluorene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Hexachlorobenzene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Hexachlorobutadiene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Hexachlorocyclopentadiene	BRL	770		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Hexachloroethane	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Indeno(1,2,3-cd)pyrene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Isophorone	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
N-Nitrosodi-n-propylamine	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
N-Nitrosodiphenylamine	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Naphthalene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Nitrobenzene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Phenanthrene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Phenol	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Pyrene	BRL	380		ug/Kg-dry	233173	1	11/21/2016 13:56	YH
Surr: 2,4,6-Tribromophenol	67.2	42.4-130		%REC	233173	1	11/21/2016 13:56	YH
Surr: 2-Fluorobiphenyl	77.7	51.5-120		%REC	233173	1	11/21/2016 13:56	YH
Surr: 2-Fluorophenol	67.5	41.1-120		%REC	233173	1	11/21/2016 13:56	YH
Surr: 4-Terphenyl-d14	87.8	52.7-117		%REC	233173	1	11/21/2016 13:56	YH
Surr: Nitrobenzene-d5	88.1	41.4-120		%REC	233173	1	11/21/2016 13:56	YH
Surr: Phenol-d5	76	47.6-120		%REC	233173	1	11/21/2016 13:56	YH
PERCENT MOISTURE D2216								
Percent Moisture	14.3	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-5-6-8
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 10:34:00 AM
Lab ID:	1611D75-035	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1´-Biphenyl	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2,4,5-Trichlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2,4,6-Trichlorophenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2,4-Dichlorophenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2,4-Dimethylphenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2,4-Dinitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2,4-Dinitrotoluene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2,6-Dinitrotoluene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2-Chloronaphthalene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2-Chlorophenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2-Methylnaphthalene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2-Methylphenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
2-Nitrophenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
3,3´-Dichlorobenzidine	BRL	830		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
3-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
4,6-Dinitro-2-methylphenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
4-Bromophenyl phenyl ether	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
4-Chloro-3-methylphenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
4-Chloroaniline	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
4-Chlorophenyl phenyl ether	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
4-Methylphenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
4-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
4-Nitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Acenaphthene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Acenaphthylene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Acetophenone	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Anthracene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Atrazine	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Benz(a)anthracene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Benzaldehyde	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Benzo(a)pyrene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Benzo(b)fluoranthene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Benzo(g,h,i)perylene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Benzo(k)fluoranthene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Bis(2-chloroethoxy)methane	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Bis(2-chloroethyl)ether	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Bis(2-chloroisopropyl)ether	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Bis(2-ethylhexyl)phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Butyl benzyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Caprolactam	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-5-6-8
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 10:34:00 AM
Lab ID:	1611D75-035	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Chrysene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Di-n-butyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Di-n-octyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Dibenz(a,h)anthracene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Dibenzofuran	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Diethyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Dimethyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Fluoranthene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Fluorene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Hexachlorobenzene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Hexachlorobutadiene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Hexachlorocyclopentadiene	BRL	820		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Hexachloroethane	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Indeno(1,2,3-cd)pyrene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Isophorone	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
N-Nitrosodi-n-propylamine	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
N-Nitrosodiphenylamine	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Naphthalene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Nitrobenzene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Pentachlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Phenanthrene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Phenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Pyrene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:42	YH
Surr: 2,4,6-Tribromophenol	79.4	42.4-130		%REC	233173	1	11/21/2016 15:42	YH
Surr: 2-Fluorobiphenyl	71.6	51.5-120		%REC	233173	1	11/21/2016 15:42	YH
Surr: 2-Fluorophenol	71.7	41.1-120		%REC	233173	1	11/21/2016 15:42	YH
Surr: 4-Terphenyl-d14	82.8	52.7-117		%REC	233173	1	11/21/2016 15:42	YH
Surr: Nitrobenzene-d5	80.9	41.4-120		%REC	233173	1	11/21/2016 15:42	YH
Surr: Phenol-d5	75.8	47.6-120		%REC	233173	1	11/21/2016 15:42	YH
PERCENT MOISTURE D2216								
Percent Moisture	19.6	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-6-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:00:00 AM
Lab ID:	1611D75-036	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2,4,6-Trichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2,4-Dichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2,4-Dimethylphenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2,4-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2,6-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2-Chloronaphthalene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2-Chlorophenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2-Methylnaphthalene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
2-Nitrophenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
3,3′-Dichlorobenzidine	BRL	800		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
4-Bromophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
4-Chloro-3-methylphenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
4-Chloroaniline	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
4-Chlorophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
4-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Acenaphthene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Acenaphthylene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Acetophenone	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Anthracene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Atrazine	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Benz(a)anthracene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Benzaldehyde	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Benzo(a)pyrene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Benzo(b)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Benzo(g,h,i)perylene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Benzo(k)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Bis(2-chloroethoxy)methane	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Bis(2-chloroethyl)ether	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Bis(2-chloroisopropyl)ether	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Bis(2-ethylhexyl)phthalate	570	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Butyl benzyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Caprolactam	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-6-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:00:00 AM
Lab ID:	1611D75-036	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Chrysene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Di-n-butyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Di-n-octyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Dibenz(a,h)anthracene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Dibenzofuran	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Diethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Dimethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Fluorene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Hexachlorobenzene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Hexachlorobutadiene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Hexachlorocyclopentadiene	BRL	790		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Hexachloroethane	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Indeno(1,2,3-cd)pyrene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Isophorone	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
N-Nitrosodi-n-propylamine	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
N-Nitrosodiphenylamine	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Naphthalene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Nitrobenzene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Phenanthrene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Phenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Pyrene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 16:09	YH
Surr: 2,4,6-Tribromophenol	62.4	42.4-130		%REC	233173	1	11/21/2016 16:09	YH
Surr: 2-Fluorobiphenyl	77.2	51.5-120		%REC	233173	1	11/21/2016 16:09	YH
Surr: 2-Fluorophenol	57.7	41.1-120		%REC	233173	1	11/21/2016 16:09	YH
Surr: 4-Terphenyl-d14	89.6	52.7-117		%REC	233173	1	11/21/2016 16:09	YH
Surr: Nitrobenzene-d5	85.1	41.4-120		%REC	233173	1	11/21/2016 16:09	YH
Surr: Phenol-d5	65.8	47.6-120		%REC	233173	1	11/21/2016 16:09	YH
PERCENT MOISTURE D2216								
Percent Moisture	16.5	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-6-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:02:00 AM
Lab ID:	1611D75-037	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2,4,6-Trichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2,4-Dichlorophenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2,4-Dimethylphenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2,4-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2,6-Dinitrotoluene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2-Chloronaphthalene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2-Chlorophenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2-Methylnaphthalene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
2-Nitrophenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
3,3′-Dichlorobenzidine	BRL	800		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
4-Bromophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
4-Chloro-3-methylphenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
4-Chloroaniline	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
4-Chlorophenyl phenyl ether	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
4-Methylphenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Acenaphthene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Acenaphthylene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Acetophenone	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Anthracene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Atrazine	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Benz(a)anthracene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Benzaldehyde	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Benzo(a)pyrene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Benzo(b)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Benzo(g,h,i)perylene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Benzo(k)fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Bis(2-chloroethoxy)methane	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Bis(2-chloroethyl)ether	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Bis(2-chloroisopropyl)ether	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Bis(2-ethylhexyl)phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Butyl benzyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Caprolactam	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-6-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:02:00 AM
Lab ID:	1611D75-037	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Chrysene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Di-n-butyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Di-n-octyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Dibenz(a,h)anthracene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Dibenzofuran	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Diethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Dimethyl phthalate	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Fluoranthene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Fluorene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Hexachlorobenzene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Hexachlorobutadiene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Hexachlorocyclopentadiene	BRL	790		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Hexachloroethane	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Indeno(1,2,3-cd)pyrene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Isophorone	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
N-Nitrosodi-n-propylamine	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
N-Nitrosodiphenylamine	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Naphthalene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Nitrobenzene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Phenanthrene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Phenol	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Pyrene	BRL	400		ug/Kg-dry	233173	1	11/21/2016 17:02	YH
Surr: 2,4,6-Tribromophenol	66.2	42.4-130		%REC	233173	1	11/21/2016 17:02	YH
Surr: 2-Fluorobiphenyl	64.4	51.5-120		%REC	233173	1	11/21/2016 17:02	YH
Surr: 2-Fluorophenol	62.5	41.1-120		%REC	233173	1	11/21/2016 17:02	YH
Surr: 4-Terphenyl-d14	81	52.7-117		%REC	233173	1	11/21/2016 17:02	YH
Surr: Nitrobenzene-d5	72.5	41.4-120		%REC	233173	1	11/21/2016 17:02	YH
Surr: Phenol-d5	67	47.6-120		%REC	233173	1	11/21/2016 17:02	YH
PERCENT MOISTURE D2216								
Percent Moisture	16.5	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-6-6-8
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:04:00 AM
Lab ID:	1611D75-038	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2,4,5-Trichlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2,4,6-Trichlorophenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2,4-Dichlorophenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2,4-Dimethylphenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2,4-Dinitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2,4-Dinitrotoluene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2,6-Dinitrotoluene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2-Chloronaphthalene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2-Chlorophenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2-Methylnaphthalene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2-Methylphenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
2-Nitrophenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
3,3′-Dichlorobenzidine	BRL	830		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
3-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
4,6-Dinitro-2-methylphenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
4-Bromophenyl phenyl ether	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
4-Chloro-3-methylphenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
4-Chloroaniline	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
4-Chlorophenyl phenyl ether	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
4-Methylphenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
4-Nitroaniline	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
4-Nitrophenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Acenaphthene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Acenaphthylene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Acetophenone	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Anthracene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Atrazine	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Benz(a)anthracene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Benzaldehyde	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Benzo(a)pyrene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Benzo(b)fluoranthene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Benzo(g,h,i)perylene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Benzo(k)fluoranthene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Bis(2-chloroethoxy)methane	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Bis(2-chloroethyl)ether	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Bis(2-chloroisopropyl)ether	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Bis(2-ethylhexyl)phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Butyl benzyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Caprolactam	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-6-6-8
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:04:00 AM
Lab ID:	1611D75-038	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Chrysene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Di-n-butyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Di-n-octyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Dibenz(a,h)anthracene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Dibenzofuran	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Diethyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Dimethyl phthalate	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Fluoranthene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Fluorene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Hexachlorobenzene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Hexachlorobutadiene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Hexachlorocyclopentadiene	BRL	810		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Hexachloroethane	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Indeno(1,2,3-cd)pyrene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Isophorone	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
N-Nitrosodi-n-propylamine	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
N-Nitrosodiphenylamine	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Naphthalene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Nitrobenzene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Pentachlorophenol	BRL	2100		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Phenanthrene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Phenol	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Pyrene	BRL	410		ug/Kg-dry	233173	1	11/21/2016 15:05	YH
Surr: 2,4,6-Tribromophenol	89.4	42.4-130		%REC	233173	1	11/21/2016 15:05	YH
Surr: 2-Fluorobiphenyl	74.1	51.5-120		%REC	233173	1	11/21/2016 15:05	YH
Surr: 2-Fluorophenol	77.3	41.1-120		%REC	233173	1	11/21/2016 15:05	YH
Surr: 4-Terphenyl-d14	87.9	52.7-117		%REC	233173	1	11/21/2016 15:05	YH
Surr: Nitrobenzene-d5	80.6	41.4-120		%REC	233173	1	11/21/2016 15:05	YH
Surr: Phenol-d5	78.2	47.6-120		%REC	233173	1	11/21/2016 15:05	YH
PERCENT MOISTURE D2216								
Percent Moisture	18.9	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-7-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:30:00 AM
Lab ID:	1611D75-039	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2,4,6-Trichlorophenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2,4-Dichlorophenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2,4-Dimethylphenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2,4-Dinitrotoluene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2,6-Dinitrotoluene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2-Chloronaphthalene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2-Chlorophenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2-Methylnaphthalene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2-Methylphenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
2-Nitrophenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
3,3′-Dichlorobenzidine	BRL	780		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
4-Bromophenyl phenyl ether	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
4-Chloro-3-methylphenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
4-Chloroaniline	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
4-Chlorophenyl phenyl ether	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
4-Methylphenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Acenaphthene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Acenaphthylene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Acetophenone	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Anthracene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Atrazine	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Benz(a)anthracene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Benzaldehyde	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Benzo(a)pyrene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Bis(2-chloroethoxy)methane	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Bis(2-chloroethyl)ether	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Bis(2-chloroisopropyl)ether	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Bis(2-ethylhexyl)phthalate	520	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Butyl benzyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Caprolactam	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-7-0-2
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:30:00 AM
Lab ID:	1611D75-039	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Chrysene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Di-n-butyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Di-n-octyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Dibenzofuran	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Diethyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Dimethyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Fluoranthene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Fluorene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Hexachlorobenzene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Hexachlorobutadiene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Hexachlorocyclopentadiene	BRL	770		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Hexachloroethane	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Isophorone	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
N-Nitrosodi-n-propylamine	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
N-Nitrosodiphenylamine	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Naphthalene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Nitrobenzene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Phenanthrene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Phenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Pyrene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 16:23	YH
Surr: 2,4,6-Tribromophenol	84	42.4-130		%REC	233173	1	11/21/2016 16:23	YH
Surr: 2-Fluorobiphenyl	72.5	51.5-120		%REC	233173	1	11/21/2016 16:23	YH
Surr: 2-Fluorophenol	68.3	41.1-120		%REC	233173	1	11/21/2016 16:23	YH
Surr: 4-Terphenyl-d14	82.5	52.7-117		%REC	233173	1	11/21/2016 16:23	YH
Surr: Nitrobenzene-d5	75.5	41.4-120		%REC	233173	1	11/21/2016 16:23	YH
Surr: Phenol-d5	70.3	47.6-120		%REC	233173	1	11/21/2016 16:23	YH
PERCENT MOISTURE D2216								
Percent Moisture	14.4	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-7-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:32:00 AM
Lab ID:	1611D75-040	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2,4,5-Trichlorophenol	BRL	2300		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2,4,6-Trichlorophenol	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2,4-Dichlorophenol	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2,4-Dimethylphenol	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2,4-Dinitrophenol	BRL	2300		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2,4-Dinitrotoluene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2,6-Dinitrotoluene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2-Chloronaphthalene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2-Chlorophenol	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2-Methylnaphthalene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2-Methylphenol	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2-Nitroaniline	BRL	2300		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
2-Nitrophenol	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
3,3′-Dichlorobenzidine	BRL	900		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
3-Nitroaniline	BRL	2300		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
4,6-Dinitro-2-methylphenol	BRL	2300		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
4-Bromophenyl phenyl ether	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
4-Chloro-3-methylphenol	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
4-Chloroaniline	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
4-Chlorophenyl phenyl ether	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
4-Methylphenol	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
4-Nitroaniline	BRL	2300		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
4-Nitrophenol	BRL	2300		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Acenaphthene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Acenaphthylene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Acetophenone	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Anthracene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Atrazine	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Benz(a)anthracene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Benzaldehyde	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Benzo(a)pyrene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Benzo(b)fluoranthene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Benzo(g,h,i)perylene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Benzo(k)fluoranthene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Bis(2-chloroethoxy)methane	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Bis(2-chloroethyl)ether	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Bis(2-chloroisopropyl)ether	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Bis(2-ethylhexyl)phthalate	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Butyl benzyl phthalate	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Caprolactam	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-7-2-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:32:00 AM
Lab ID:	1611D75-040	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Chrysene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Di-n-butyl phthalate	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Di-n-octyl phthalate	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Dibenz(a,h)anthracene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Dibenzofuran	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Diethyl phthalate	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Dimethyl phthalate	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Fluoranthene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Fluorene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Hexachlorobenzene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Hexachlorobutadiene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Hexachlorocyclopentadiene	BRL	880		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Hexachloroethane	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Indeno(1,2,3-cd)pyrene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Isophorone	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
N-Nitrosodi-n-propylamine	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
N-Nitrosodiphenylamine	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Naphthalene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Nitrobenzene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Pentachlorophenol	BRL	2300		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Phenanthrene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Phenol	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Pyrene	BRL	440		ug/Kg-dry	233173	1	11/21/2016 16:49	YH
Surr: 2,4,6-Tribromophenol	90.5	42.4-130		%REC	233173	1	11/21/2016 16:49	YH
Surr: 2-Fluorobiphenyl	73.5	51.5-120		%REC	233173	1	11/21/2016 16:49	YH
Surr: 2-Fluorophenol	73.1	41.1-120		%REC	233173	1	11/21/2016 16:49	YH
Surr: 4-Terphenyl-d14	87.2	52.7-117		%REC	233173	1	11/21/2016 16:49	YH
Surr: Nitrobenzene-d5	79.7	41.4-120		%REC	233173	1	11/21/2016 16:49	YH
Surr: Phenol-d5	73.9	47.6-120		%REC	233173	1	11/21/2016 16:49	YH
PERCENT MOISTURE D2216								
Percent Moisture	25.4	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-7-6-9
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:34:00 AM
Lab ID:	1611D75-041	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2,4,6-Trichlorophenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2,4-Dichlorophenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2,4-Dimethylphenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2,4-Dinitrotoluene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2,6-Dinitrotoluene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2-Chloronaphthalene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2-Chlorophenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2-Methylnaphthalene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2-Methylphenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
2-Nitrophenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
3,3′-Dichlorobenzidine	BRL	800		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
4-Bromophenyl phenyl ether	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
4-Chloro-3-methylphenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
4-Chloroaniline	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
4-Chlorophenyl phenyl ether	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
4-Methylphenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Acenaphthene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Acenaphthylene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Acetophenone	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Anthracene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Atrazine	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Benz(a)anthracene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Benzaldehyde	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Benzo(a)pyrene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Bis(2-chloroethoxy)methane	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Bis(2-chloroethyl)ether	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Bis(2-chloroisopropyl)ether	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Bis(2-ethylhexyl)phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Butyl benzyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Caprolactam	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-51-7-6-9
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 11:34:00 AM
Lab ID:	1611D75-041	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Chrysene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Di-n-butyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Di-n-octyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Dibenzofuran	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Diethyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Dimethyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Fluoranthene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Fluorene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Hexachlorobenzene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Hexachlorobutadiene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Hexachlorocyclopentadiene	BRL	790		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Hexachloroethane	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Isophorone	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
N-Nitrosodi-n-propylamine	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
N-Nitrosodiphenylamine	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Naphthalene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Nitrobenzene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Phenanthrene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Phenol	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Pyrene	BRL	390		ug/Kg-dry	233173	1	11/21/2016 15:57	YH
Surr: 2,4,6-Tribromophenol	67.4	42.4-130		%REC	233173	1	11/21/2016 15:57	YH
Surr: 2-Fluorobiphenyl	65.5	51.5-120		%REC	233173	1	11/21/2016 15:57	YH
Surr: 2-Fluorophenol	57.6	41.1-120		%REC	233173	1	11/21/2016 15:57	YH
Surr: 4-Terphenyl-d14	75.7	52.7-117		%REC	233173	1	11/21/2016 15:57	YH
Surr: Nitrobenzene-d5	55.7	41.4-120		%REC	233173	1	11/21/2016 15:57	YH
Surr: Phenol-d5	61.4	47.6-120		%REC	233173	1	11/21/2016 15:57	YH
PERCENT MOISTURE D2216								
Percent Moisture	16.1	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-36-5-2-3.5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 1:50:00 PM
Lab ID:	1611D75-042	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.110		mg/Kg-dry	232973	1	11/16/2016 16:05	JR
METALS, TOTAL SW6010D					**(SW3050B)**			
Arsenic	BRL	4.79		mg/Kg-dry	233240	1	11/21/2016 14:39	IO
Barium	22.1	4.79		mg/Kg-dry	233240	1	11/21/2016 14:39	IO
Cadmium	BRL	2.39		mg/Kg-dry	233240	1	11/21/2016 14:39	IO
Chromium	7.07	2.39		mg/Kg-dry	233240	1	11/21/2016 14:39	IO
Copper	BRL	2.39		mg/Kg-dry	233240	1	11/21/2016 14:39	IO
Lead	6.77	4.79		mg/Kg-dry	233240	1	11/21/2016 14:39	IO
Selenium	BRL	4.79		mg/Kg-dry	233240	1	11/21/2016 14:39	IO
Silver	BRL	2.39		mg/Kg-dry	233240	1	11/21/2016 14:39	IO
PERCENT MOISTURE D2216								
Percent Moisture	10.3	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-36-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 1:50:00 PM
Lab ID:	1611D75-043	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Mercury, Total SW7470A					**(SW7470A)**			
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:06	JR
METALS, TOTAL SW6010D					**(SW3010A)**			
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:15	IO
Barium	0.0421	0.0200		mg/L	233332	1	11/20/2016 22:15	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:15	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:15	IO
Copper	BRL	0.0100		mg/L	233332	1	11/20/2016 22:15	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:15	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:15	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:15	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-27-2.4-3.7
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 2:25:00 PM
Lab ID:	1611D75-044	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,1,2,2-Tetrachloroethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,1,2-Trichloroethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,1-Dichloroethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,1-Dichloroethene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,2,4-Trichlorobenzene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,2-Dibromo-3-chloropropane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,2-Dibromoethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,2-Dichlorobenzene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,2-Dichloroethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,2-Dichloropropane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,3-Dichlorobenzene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
1,4-Dichlorobenzene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
2-Butanone	BRL	31		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
2-Hexanone	BRL	6.2		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
4-Methyl-2-pentanone	BRL	6.2		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Acetone	BRL	62		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Benzene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Bromodichloromethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Bromoform	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Bromomethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Carbon disulfide	BRL	6.2		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Carbon tetrachloride	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Chlorobenzene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Chloroethane	BRL	6.2		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Chloroform	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Chloromethane	BRL	6.2		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
cis-1,2-Dichloroethene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
cis-1,3-Dichloropropene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Cyclohexane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Dibromochloromethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Dichlorodifluoromethane	BRL	6.2		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Ethylbenzene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Freon-113	BRL	6.2		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Isopropylbenzene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
m,p-Xylene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Methyl acetate	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Methyl tert-butyl ether	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Methylcyclohexane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Methylene chloride	BRL	12		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
o-Xylene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-27-2.4-3.7
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 2:25:00 PM
Lab ID:	1611D75-044	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Styrene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Tetrachloroethene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Toluene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
trans-1,2-Dichloroethene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
trans-1,3-Dichloropropene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Trichloroethene	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Trichlorofluoromethane	BRL	3.1		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Vinyl chloride	BRL	6.2		ug/Kg-dry	233202	1	11/18/2016 02:45	MD
Surr: 4-Bromofluorobenzene	92.1	70-128		%REC	233202	1	11/18/2016 02:45	MD
Surr: Dibromofluoromethane	106	78.2-128		%REC	233202	1	11/18/2016 02:45	MD
Surr: Toluene-d8	95.6	76.5-116		%REC	233202	1	11/18/2016 02:45	MD
PERCENT MOISTURE D2216								
Percent Moisture	12.1	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-36-6-2-3.5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 2:50:00 PM
Lab ID:	1611D75-045	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.122		mg/Kg-dry	232973	1	11/16/2016 16:07	JR
METALS, TOTAL SW6010D					**(SW3050B)**			
Arsenic	BRL	3.55		mg/Kg-dry	233240	1	11/21/2016 14:42	IO
Barium	14.8	3.55		mg/Kg-dry	233240	1	11/21/2016 14:42	IO
Cadmium	BRL	1.77		mg/Kg-dry	233240	1	11/21/2016 14:42	IO
Chromium	4.75	1.77		mg/Kg-dry	233240	1	11/21/2016 14:42	IO
Copper	BRL	1.77		mg/Kg-dry	233240	1	11/21/2016 14:42	IO
Lead	4.91	3.55		mg/Kg-dry	233240	1	11/21/2016 14:42	IO
Selenium	BRL	3.55		mg/Kg-dry	233240	1	11/21/2016 14:42	IO
Silver	BRL	1.77		mg/Kg-dry	233240	1	11/21/2016 14:42	IO
PERCENT MOISTURE D2216								
Percent Moisture	19.5	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-36-6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 2:50:00 PM
Lab ID:	1611D75-046	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Mercury, Total SW7470A					**(SW7470A)**			
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:08	JR
METALS, TOTAL SW6010D					**(SW3010A)**			
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:19	IO
Barium	0.0452	0.0200		mg/L	233332	1	11/20/2016 22:19	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:19	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:19	IO
Copper	BRL	0.0100		mg/L	233332	1	11/20/2016 22:19	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:19	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:19	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:19	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-36-1-2.5-3.5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 3:15:00 PM
Lab ID:	1611D75-047	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.111		mg/Kg-dry	232973	1	11/16/2016 16:09	JR
METALS, TOTAL SW6010D					**(SW3050B)**			
Arsenic	BRL	4.44		mg/Kg-dry	233240	1	11/21/2016 14:53	IO
Barium	24.1	4.44		mg/Kg-dry	233240	1	11/21/2016 14:53	IO
Cadmium	BRL	2.22		mg/Kg-dry	233240	1	11/21/2016 14:53	IO
Chromium	7.67	2.22		mg/Kg-dry	233240	1	11/21/2016 14:53	IO
Copper	BRL	2.22		mg/Kg-dry	233240	1	11/21/2016 14:53	IO
Lead	4.87	4.44		mg/Kg-dry	233240	1	11/21/2016 14:53	IO
Selenium	BRL	4.44		mg/Kg-dry	233240	1	11/21/2016 14:53	IO
Silver	BRL	2.22		mg/Kg-dry	233240	1	11/21/2016 14:53	IO
PERCENT MOISTURE D2216								
Percent Moisture	10.9	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-DUP-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016
Lab ID:	1611D75-048	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.117		mg/Kg-dry	232973	1	11/16/2016 16:11	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	4.57		mg/Kg-dry	233240	1	11/21/2016 14:59	IO
Barium	20.4	4.57		mg/Kg-dry	233240	1	11/21/2016 14:59	IO
Cadmium	BRL	2.29		mg/Kg-dry	233240	1	11/21/2016 14:59	IO
Chromium	9.26	2.29		mg/Kg-dry	233240	1	11/21/2016 14:59	IO
Copper	BRL	2.29		mg/Kg-dry	233240	1	11/21/2016 14:59	IO
Lead	5.41	4.57		mg/Kg-dry	233240	1	11/21/2016 14:59	IO
Selenium	BRL	4.57		mg/Kg-dry	233240	1	11/21/2016 14:59	IO
Silver	BRL	2.29		mg/Kg-dry	233240	1	11/21/2016 14:59	IO
PERCENT MOISTURE D2216								
Percent Moisture	14.4	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-DUP-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016
Lab ID:	1611D75-049	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2,4,5-Trichlorophenol	BRL	1900		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2,4,6-Trichlorophenol	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2,4-Dichlorophenol	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2,4-Dimethylphenol	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2,4-Dinitrophenol	BRL	1900		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2,4-Dinitrotoluene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2,6-Dinitrotoluene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2-Chloronaphthalene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2-Chlorophenol	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2-Methylnaphthalene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2-Methylphenol	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2-Nitroaniline	BRL	1900		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
2-Nitrophenol	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
3,3′-Dichlorobenzidine	BRL	760		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
3-Nitroaniline	BRL	1900		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
4,6-Dinitro-2-methylphenol	BRL	1900		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
4-Bromophenyl phenyl ether	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
4-Chloro-3-methylphenol	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
4-Chloroaniline	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
4-Chlorophenyl phenyl ether	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
4-Methylphenol	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
4-Nitroaniline	BRL	1900		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
4-Nitrophenol	BRL	1900		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Acenaphthene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Acenaphthylene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Acetophenone	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Anthracene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Atrazine	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Benz(a)anthracene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Benzaldehyde	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Benzo(a)pyrene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Benzo(b)fluoranthene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Benzo(g,h,i)perylene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Benzo(k)fluoranthene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Bis(2-chloroethoxy)methane	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Bis(2-chloroethyl)ether	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Bis(2-chloroisopropyl)ether	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Bis(2-ethylhexyl)phthalate	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Butyl benzyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Caprolactam	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-DUP-3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016
Lab ID:	1611D75-049	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Chrysene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Di-n-butyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Di-n-octyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Dibenz(a,h)anthracene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Dibenzofuran	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Diethyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Dimethyl phthalate	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Fluoranthene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Fluorene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Hexachlorobenzene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Hexachlorobutadiene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Hexachlorocyclopentadiene	BRL	750		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Hexachloroethane	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Indeno(1,2,3-cd)pyrene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Isophorone	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
N-Nitrosodi-n-propylamine	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
N-Nitrosodiphenylamine	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Naphthalene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Nitrobenzene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Pentachlorophenol	BRL	1900		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Phenanthrene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Phenol	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Pyrene	BRL	370		ug/Kg-dry	233173	1	11/21/2016 16:25	YH
Surr: 2,4,6-Tribromophenol	75.1	42.4-130		%REC	233173	1	11/21/2016 16:25	YH
Surr: 2-Fluorobiphenyl	80.5	51.5-120		%REC	233173	1	11/21/2016 16:25	YH
Surr: 2-Fluorophenol	67	41.1-120		%REC	233173	1	11/21/2016 16:25	YH
Surr: 4-Terphenyl-d14	86.7	52.7-117		%REC	233173	1	11/21/2016 16:25	YH
Surr: Nitrobenzene-d5	69	41.4-120		%REC	233173	1	11/21/2016 16:25	YH
Surr: Phenol-d5	69.4	47.6-120		%REC	233173	1	11/21/2016 16:25	YH
PERCENT MOISTURE D2216								
Percent Moisture	11.9	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-DUP-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016
Lab ID:	1611D75-050	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2,4,5-Trichlorophenol	BRL	2200		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2,4,6-Trichlorophenol	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2,4-Dichlorophenol	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2,4-Dimethylphenol	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2,4-Dinitrophenol	BRL	2200		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2,4-Dinitrotoluene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2,6-Dinitrotoluene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2-Chloronaphthalene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2-Chlorophenol	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2-Methylnaphthalene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2-Methylphenol	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2-Nitroaniline	BRL	2200		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
2-Nitrophenol	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
3,3′-Dichlorobenzidine	BRL	850		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
3-Nitroaniline	BRL	2200		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
4,6-Dinitro-2-methylphenol	BRL	2200		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
4-Bromophenyl phenyl ether	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
4-Chloro-3-methylphenol	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
4-Chloroaniline	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
4-Chlorophenyl phenyl ether	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
4-Methylphenol	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
4-Nitroaniline	BRL	2200		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
4-Nitrophenol	BRL	2200		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Acenaphthene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Acenaphthylene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Acetophenone	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Anthracene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Atrazine	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Benz(a)anthracene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Benzaldehyde	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Benzo(a)pyrene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Benzo(b)fluoranthene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Benzo(g,h,i)perylene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Benzo(k)fluoranthene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Bis(2-chloroethoxy)methane	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Bis(2-chloroethyl)ether	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Bis(2-chloroisopropyl)ether	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Bis(2-ethylhexyl)phthalate	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Butyl benzyl phthalate	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Caprolactam	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-DUP-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016
Lab ID:	1611D75-050	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D (SW3550C)								
Carbazole	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Chrysene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Di-n-butyl phthalate	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Di-n-octyl phthalate	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Dibenz(a,h)anthracene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Dibenzofuran	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Diethyl phthalate	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Dimethyl phthalate	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Fluoranthene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Fluorene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Hexachlorobenzene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Hexachlorobutadiene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Hexachlorocyclopentadiene	BRL	830		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Hexachloroethane	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Indeno(1,2,3-cd)pyrene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Isophorone	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
N-Nitrosodi-n-propylamine	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
N-Nitrosodiphenylamine	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Naphthalene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Nitrobenzene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Pentachlorophenol	BRL	2200		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Phenanthrene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Phenol	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Pyrene	BRL	420		ug/Kg-dry	233173	1	11/21/2016 16:54	YH
Surr: 2,4,6-Tribromophenol	69.6	42.4-130		%REC	233173	1	11/21/2016 16:54	YH
Surr: 2-Fluorobiphenyl	66.8	51.5-120		%REC	233173	1	11/21/2016 16:54	YH
Surr: 2-Fluorophenol	62.2	41.1-120		%REC	233173	1	11/21/2016 16:54	YH
Surr: 4-Terphenyl-d14	81	52.7-117		%REC	233173	1	11/21/2016 16:54	YH
Surr: Nitrobenzene-d5	56	41.4-120		%REC	233173	1	11/21/2016 16:54	YH
Surr: Phenol-d5	65.1	47.6-120		%REC	233173	1	11/21/2016 16:54	YH
PERCENT MOISTURE D2216								
Percent Moisture	20.9	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-DUP-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016
Lab ID:	1611D75-051	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
1,1′-Biphenyl	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2,4,5-Trichlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2,4,6-Trichlorophenol	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2,4-Dichlorophenol	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2,4-Dimethylphenol	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2,4-Dinitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2,4-Dinitrotoluene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2,6-Dinitrotoluene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2-Chloronaphthalene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2-Chlorophenol	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2-Methylnaphthalene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2-Methylphenol	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
2-Nitrophenol	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
3,3′-Dichlorobenzidine	BRL	790		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
3-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
4,6-Dinitro-2-methylphenol	BRL	2000		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
4-Bromophenyl phenyl ether	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
4-Chloro-3-methylphenol	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
4-Chloroaniline	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
4-Chlorophenyl phenyl ether	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
4-Methylphenol	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
4-Nitroaniline	BRL	2000		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
4-Nitrophenol	BRL	2000		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Acenaphthene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Acenaphthylene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Acetophenone	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Anthracene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Atrazine	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Benz(a)anthracene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Benzaldehyde	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Benzo(a)pyrene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Benzo(b)fluoranthene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Benzo(g,h,i)perylene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Benzo(k)fluoranthene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Bis(2-chloroethoxy)methane	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Bis(2-chloroethyl)ether	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Bis(2-chloroisopropyl)ether	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Bis(2-ethylhexyl)phthalate	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Butyl benzyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Caprolactam	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-DUP-5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016
Lab ID:	1611D75-051	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3550C)**				
Carbazole	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Chrysene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Di-n-butyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Di-n-octyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Dibenz(a,h)anthracene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Dibenzofuran	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Diethyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Dimethyl phthalate	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Fluoranthene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Fluorene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Hexachlorobenzene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Hexachlorobutadiene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Hexachlorocyclopentadiene	BRL	780		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Hexachloroethane	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Indeno(1,2,3-cd)pyrene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Isophorone	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
N-Nitrosodi-n-propylamine	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
N-Nitrosodiphenylamine	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Naphthalene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Nitrobenzene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Pentachlorophenol	BRL	2000		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Phenanthrene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Phenol	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Pyrene	BRL	390		ug/Kg-dry	233173	1	11/18/2016 17:55	YH
Surr: 2,4,6-Tribromophenol	76.4	42.4-130		%REC	233173	1	11/18/2016 17:55	YH
Surr: 2-Fluorobiphenyl	76.7	51.5-120		%REC	233173	1	11/18/2016 17:55	YH
Surr: 2-Fluorophenol	73.5	41.1-120		%REC	233173	1	11/18/2016 17:55	YH
Surr: 4-Terphenyl-d14	83.2	52.7-117		%REC	233173	1	11/18/2016 17:55	YH
Surr: Nitrobenzene-d5	70.8	41.4-120		%REC	233173	1	11/18/2016 17:55	YH
Surr: Phenol-d5	74.1	47.6-120		%REC	233173	1	11/18/2016 17:55	YH
PERCENT MOISTURE D2216								
Percent Moisture	15.4	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-36-2-
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 3:40:00 PM
Lab ID:	1611D75-052	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.120		mg/Kg-dry	232973	1	11/16/2016 16:13	JR
METALS, TOTAL SW6010D					**(SW3050B)**			
Arsenic	BRL	4.60		mg/Kg-dry	233240	1	11/21/2016 15:02	IO
Barium	34.0	4.60		mg/Kg-dry	233240	1	11/21/2016 15:02	IO
Cadmium	BRL	2.30		mg/Kg-dry	233240	1	11/21/2016 15:02	IO
Chromium	12.4	2.30		mg/Kg-dry	233240	1	11/21/2016 15:02	IO
Copper	2.95	2.30		mg/Kg-dry	233240	1	11/21/2016 15:02	IO
Lead	7.59	4.60		mg/Kg-dry	233240	1	11/21/2016 15:02	IO
Selenium	BRL	4.60		mg/Kg-dry	233240	1	11/21/2016 15:02	IO
Silver	BRL	2.30		mg/Kg-dry	233240	1	11/21/2016 15:02	IO
PERCENT MOISTURE D2216								
Percent Moisture	17.9	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-36-2-
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 3:40:00 PM
Lab ID:	1611D75-053	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Mercury, Total SW7470A					**(SW7470A)**			
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:10	JR
METALS, TOTAL SW6010D					**(SW3010A)**			
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:23	IO
Barium	0.0792	0.0200		mg/L	233332	1	11/20/2016 22:23	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:23	IO
Chromium	0.0317	0.0100		mg/L	233332	1	11/20/2016 22:23	IO
Copper	BRL	0.0100		mg/L	233332	1	11/20/2016 22:23	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:23	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:23	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:23	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-DUP-2-
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016
Lab ID:	1611D75-054	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.117		mg/Kg-dry	232973	1	11/16/2016 16:16	JR
METALS, TOTAL SW6010D				**(SW3050B)**				
Arsenic	BRL	3.81		mg/Kg-dry	233240	1	11/21/2016 15:06	IO
Barium	68.2	3.81		mg/Kg-dry	233240	1	11/21/2016 15:06	IO
Cadmium	BRL	1.90		mg/Kg-dry	233240	1	11/21/2016 15:06	IO
Chromium	16.2	1.90		mg/Kg-dry	233240	1	11/21/2016 15:06	IO
Copper	3.06	1.90		mg/Kg-dry	233240	1	11/21/2016 15:06	IO
Lead	11.9	3.81		mg/Kg-dry	233240	1	11/21/2016 15:06	IO
Selenium	BRL	3.81		mg/Kg-dry	233240	1	11/21/2016 15:06	IO
Silver	BRL	1.90		mg/Kg-dry	233240	1	11/21/2016 15:06	IO
PERCENT MOISTURE D2216								
Percent Moisture	20.5	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-DUP-2-
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016
Lab ID:	1611D75-055	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Mercury, Total SW7470A					**(SW7470A)**			
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:12	JR
METALS, TOTAL SW6010D					**(SW3010A)**			
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:27	IO
Barium	0.0989	0.0200		mg/L	233332	1	11/20/2016 22:27	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:27	IO
Chromium	0.0661	0.0100		mg/L	233332	1	11/20/2016 22:27	IO
Copper	0.0157	0.0100		mg/L	233332	1	11/20/2016 22:27	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:27	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:27	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:27	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-36-3-2.6-3.6
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 4:15:00 PM
Lab ID:	1611D75-056	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.113		mg/Kg-dry	232973	1	11/16/2016 16:18	JR
METALS, TOTAL SW6010D					**(SW3050B)**			
Arsenic	15.7	4.66		mg/Kg-dry	233240	1	11/21/2016 15:10	IO
Barium	194	4.66		mg/Kg-dry	233240	1	11/21/2016 15:10	IO
Cadmium	BRL	2.33		mg/Kg-dry	233240	1	11/21/2016 15:10	IO
Chromium	13.5	2.33		mg/Kg-dry	233240	1	11/21/2016 15:10	IO
Copper	15.8	2.33		mg/Kg-dry	233240	1	11/21/2016 15:10	IO
Lead	7.86	4.66		mg/Kg-dry	233240	1	11/21/2016 15:10	IO
Selenium	BRL	4.66		mg/Kg-dry	233240	1	11/21/2016 15:10	IO
Silver	BRL	2.33		mg/Kg-dry	233240	1	11/21/2016 15:10	IO
PERCENT MOISTURE D2216								
Percent Moisture	21.1	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-36-4-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 4:45:00 PM
Lab ID:	1611D75-057	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.109		mg/Kg-dry	232973	1	11/16/2016 16:25	JR
METALS, TOTAL SW6010D					**(SW3050B)**			
Arsenic	BRL	5.02		mg/Kg-dry	233240	1	11/21/2016 15:14	IO
Barium	23.7	5.02		mg/Kg-dry	233240	1	11/21/2016 15:14	IO
Cadmium	BRL	2.51		mg/Kg-dry	233240	1	11/21/2016 15:14	IO
Chromium	8.30	2.51		mg/Kg-dry	233240	1	11/21/2016 15:14	IO
Copper	27.3	2.51		mg/Kg-dry	233240	1	11/21/2016 15:14	IO
Lead	11.1	5.02		mg/Kg-dry	233240	1	11/21/2016 15:14	IO
Selenium	BRL	5.02		mg/Kg-dry	233240	1	11/21/2016 15:14	IO
Silver	BRL	2.51		mg/Kg-dry	233240	1	11/21/2016 15:14	IO
PERCENT MOISTURE D2216								
Percent Moisture	14.5	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	GW-36-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 4:45:00 PM
Lab ID:	1611D75-058	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Mercury, Total SW7470A					**(SW7470A)**			
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:14	JR
METALS, TOTAL SW6010D					**(SW3010A)**			
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:30	IO
Barium	0.0900	0.0200		mg/L	233332	1	11/20/2016 22:30	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:30	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:30	IO
Copper	BRL	0.0100		mg/L	233332	1	11/20/2016 22:30	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:30	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:30	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:30	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	SB-36-9-0-1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 5:10:00 PM
Lab ID:	1611D75-059	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.0972		mg/Kg-dry	232973	1	11/16/2016 16:27	JR
METALS, TOTAL SW6010D					**(SW3050B)**			
Arsenic	7.86	4.02		mg/Kg-dry	233240	1	11/21/2016 15:18	IO
Barium	58.9	4.02		mg/Kg-dry	233240	1	11/21/2016 15:18	IO
Cadmium	BRL	2.01		mg/Kg-dry	233240	1	11/21/2016 15:18	IO
Chromium	6.93	2.01		mg/Kg-dry	233240	1	11/21/2016 15:18	IO
Copper	9.70	2.01		mg/Kg-dry	233240	1	11/21/2016 15:18	IO
Lead	51.2	4.02		mg/Kg-dry	233240	1	11/21/2016 15:18	IO
Selenium	BRL	4.02		mg/Kg-dry	233240	1	11/21/2016 15:18	IO
Silver	BRL	2.01		mg/Kg-dry	233240	1	11/21/2016 15:18	IO
PERCENT MOISTURE D2216								
Percent Moisture	6.44	0		wt%	R330395	1	11/21/2016 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 6:00:00 PM
Lab ID:	1611D75-060	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
2-Butanone	BRL	50		ug/L	233054	1	11/21/2016 12:49	BN
2-Hexanone	BRL	10		ug/L	233054	1	11/21/2016 12:49	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233054	1	11/21/2016 12:49	BN
Acetone	BRL	50		ug/L	233054	1	11/21/2016 12:49	BN
Benzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Bromodichloromethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Bromoform	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Bromomethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Carbon disulfide	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Carbon tetrachloride	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Chlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Chloroethane	BRL	10		ug/L	233054	1	11/21/2016 12:49	BN
Chloroform	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Chloromethane	BRL	10		ug/L	233054	1	11/21/2016 12:49	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Cyclohexane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Dibromochloromethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Dichlorodifluoromethane	BRL	10		ug/L	233054	1	11/21/2016 12:49	BN
Ethylbenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Freon-113	BRL	10		ug/L	233054	1	11/21/2016 12:49	BN
Isopropylbenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
m,p-Xylene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Methyl acetate	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Methylcyclohexane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Methylene chloride	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
o-Xylene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 6:00:00 PM
Lab ID:	1611D75-060	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Tetrachloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Toluene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Trichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:49	BN
Vinyl chloride	BRL	2.0		ug/L	233054	1	11/21/2016 12:49	BN
Surr: 4-Bromofluorobenzene	85	66.1-129		%REC	233054	1	11/21/2016 12:49	BN
Surr: Dibromofluoromethane	96.8	83.6-123		%REC	233054	1	11/21/2016 12:49	BN
Surr: Toluene-d8	88.6	81.8-118		%REC	233054	1	11/21/2016 12:49	BN
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:20	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/18/2016 06:57	JE
Surr: a.a.a-trifluorotoluene	106	75.1-120		%REC	233054	1	11/18/2016 06:57	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/17/2016 21:08	RF
Surr: Dioctylphthalate	67.2	47-119		%REC	233098	1	11/17/2016 21:08	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	FB-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 6:00:00 PM
Lab ID:	1611D75-060	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 17:13	RF
Surr: Nitrobenzene-d5	48.4	56.9-120	S	%REC	233025	1	11/22/2016 17:13	RF
Surr: 2-Fluorobiphenyl	53.7	55.6-120	S	%REC	233025	1	11/22/2016 17:13	RF
Surr: 4-Terphenyl-d14	79.1	45.7-120		%REC	233025	1	11/22/2016 17:13	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:41	IO
Barium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:41	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:41	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:41	IO
Copper	BRL	0.0100		mg/L	233332	1	11/20/2016 22:41	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:41	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:41	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:41	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 6:10:00 PM
Lab ID:	1611D75-061	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,1,2-Trichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,1-Dichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,1-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,2-Dibromoethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,2-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,2-Dichloroethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,2-Dichloropropane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,3-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
1,4-Dichlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
2-Butanone	BRL	50		ug/L	233054	1	11/21/2016 12:20	BN
2-Hexanone	BRL	10		ug/L	233054	1	11/21/2016 12:20	BN
4-Methyl-2-pentanone	BRL	10		ug/L	233054	1	11/21/2016 12:20	BN
Acetone	BRL	50		ug/L	233054	1	11/21/2016 12:20	BN
Benzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Bromodichloromethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Bromoform	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Bromomethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Carbon disulfide	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Carbon tetrachloride	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Chlorobenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Chloroethane	BRL	10		ug/L	233054	1	11/21/2016 12:20	BN
Chloroform	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Chloromethane	BRL	10		ug/L	233054	1	11/21/2016 12:20	BN
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Cyclohexane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Dibromochloromethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Dichlorodifluoromethane	BRL	10		ug/L	233054	1	11/21/2016 12:20	BN
Ethylbenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Freon-113	BRL	10		ug/L	233054	1	11/21/2016 12:20	BN
Isopropylbenzene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
m,p-Xylene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Methyl acetate	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Methyl tert-butyl ether	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Methylcyclohexane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Methylene chloride	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
o-Xylene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 6:10:00 PM
Lab ID:	1611D75-061	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Tetrachloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Toluene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Trichloroethene	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Trichlorofluoromethane	BRL	5.0		ug/L	233054	1	11/21/2016 12:20	BN
Vinyl chloride	BRL	2.0		ug/L	233054	1	11/21/2016 12:20	BN
Surr: 4-Bromofluorobenzene	81.8	66.1-129		%REC	233054	1	11/21/2016 12:20	BN
Surr: Dibromofluoromethane	91.4	83.6-123		%REC	233054	1	11/21/2016 12:20	BN
Surr: Toluene-d8	95.9	81.8-118		%REC	233054	1	11/21/2016 12:20	BN
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	233182	1	11/18/2016 14:22	JR
GASOLINE RANGE ORGANICS SW8015C				**(SW5030B)**				
TPH (Gasoline Range Organics)	BRL	0.50		mg/L	233054	1	11/18/2016 07:26	JE
Surr: a.a.a-trifluorotoluene	107	75.1-120		%REC	233054	1	11/18/2016 07:26	JE
DIESEL RANGE ORGANICS SW8015C				**(SW3510C)**				
Diesel Range Organics	BRL	0.20		mg/L	233098	1	11/17/2016 21:31	RF
Surr: Dioctylphthalate	73.4	47-119		%REC	233098	1	11/17/2016 21:31	RF
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Naphthalene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Acenaphthylene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
1-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
2-Methylnaphthalene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Acenaphthene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Fluorene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Phenanthrene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Anthracene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Pyrene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Benz(a)anthracene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Chrysene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Benzo(b)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Benzo(k)fluoranthene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Benzo(a)pyrene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Dibenz(a,h)anthracene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Benzo(g,h,i)perylene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	RB-4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/14/2016 6:10:00 PM
Lab ID:	1611D75-061	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
POLYAROMATIC HYDROCARBONS SW8270D				**(SW3510C)**				
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	233025	1	11/22/2016 17:41	RF
Surr: Nitrobenzene-d5	35.9	56.9-120	S	%REC	233025	1	11/22/2016 17:41	RF
Surr: 2-Fluorobiphenyl	36.2	55.6-120	S	%REC	233025	1	11/22/2016 17:41	RF
Surr: 4-Terphenyl-d14	47.6	45.7-120		%REC	233025	1	11/22/2016 17:41	RF
METALS, TOTAL SW6010D				**(SW3010A)**				
Arsenic	BRL	0.0500		mg/L	233332	1	11/20/2016 22:44	IO
Barium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:44	IO
Cadmium	BRL	0.0050		mg/L	233332	1	11/20/2016 22:44	IO
Chromium	BRL	0.0100		mg/L	233332	1	11/20/2016 22:44	IO
Copper	BRL	0.0100		mg/L	233332	1	11/20/2016 22:44	IO
Lead	BRL	0.0100		mg/L	233332	1	11/20/2016 22:44	IO
Selenium	BRL	0.0200		mg/L	233332	1	11/20/2016 22:44	IO
Silver	BRL	0.0100		mg/L	233332	1	11/20/2016 22:44	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK #1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016
Lab ID:	1611D75-062	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 14:16	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 14:16	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 14:16	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 14:16	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 14:16	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 14:16	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 14:16	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 14:16	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK #1
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016
Lab ID:	1611D75-062	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:16	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 14:16	NP
Surr: 4-Bromofluorobenzene	91.4	66.1-129		%REC	233243	1	11/18/2016 14:16	NP
Surr: Dibromofluoromethane	102	83.6-123		%REC	233243	1	11/18/2016 14:16	NP
Surr: Toluene-d8	101	81.8-118		%REC	233243	1	11/18/2016 14:16	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK #3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016
Lab ID:	1611D75-064	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 14:40	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 14:40	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 14:40	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 14:40	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 14:40	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 14:40	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 14:40	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 14:40	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK #3
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016
Lab ID:	1611D75-064	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 14:40	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 14:40	NP
Surr: 4-Bromofluorobenzene	91	66.1-129		%REC	233243	1	11/18/2016 14:40	NP
Surr: Dibromofluoromethane	101	83.6-123		%REC	233243	1	11/18/2016 14:40	NP
Surr: Toluene-d8	100	81.8-118		%REC	233243	1	11/18/2016 14:40	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK #4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016
Lab ID:	1611D75-065	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 15:03	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 15:03	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 15:03	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 15:03	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 15:03	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 15:03	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 15:03	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 15:03	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK #4
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016
Lab ID:	1611D75-065	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 15:03	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 15:03	NP
Surr: 4-Bromofluorobenzene	90.3	66.1-129		%REC	233243	1	11/18/2016 15:03	NP
Surr: Dibromofluoromethane	103	83.6-123		%REC	233243	1	11/18/2016 15:03	NP
Surr: Toluene-d8	101	81.8-118		%REC	233243	1	11/18/2016 15:03	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK #5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016
Lab ID:	1611D75-066	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,1-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,1-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,2-Dibromoethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,2-Dichloroethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,2-Dichloropropane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
2-Butanone	BRL	50		ug/L	233243	1	11/18/2016 13:53	NP
2-Hexanone	BRL	10		ug/L	233243	1	11/18/2016 13:53	NP
4-Methyl-2-pentanone	BRL	10		ug/L	233243	1	11/18/2016 13:53	NP
Acetone	BRL	50		ug/L	233243	1	11/18/2016 13:53	NP
Benzene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Bromodichloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Bromoform	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Bromomethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Carbon disulfide	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Carbon tetrachloride	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Chlorobenzene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Chloroethane	BRL	10		ug/L	233243	1	11/18/2016 13:53	NP
Chloroform	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Chloromethane	BRL	10		ug/L	233243	1	11/18/2016 13:53	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Cyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Dibromochloromethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Dichlorodifluoromethane	BRL	10		ug/L	233243	1	11/18/2016 13:53	NP
Ethylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Freon-113	BRL	10		ug/L	233243	1	11/18/2016 13:53	NP
Isopropylbenzene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
m,p-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Methyl acetate	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Methylcyclohexane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Methylene chloride	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
o-Xylene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	Resolute Env. & Water Resources Consulting, LLC	**Client Sample ID:**	TRIP BLANK #5
Project Name:	Troutman Sanders Plant Kraft	**Collection Date:**	11/15/2016
Lab ID:	1611D75-066	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Tetrachloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Toluene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Trichloroethene	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Trichlorofluoromethane	BRL	5.0		ug/L	233243	1	11/18/2016 13:53	NP
Vinyl chloride	BRL	2.0		ug/L	233243	1	11/18/2016 13:53	NP
Surr: 4-Bromofluorobenzene	90.3	66.1-129		%REC	233243	1	11/18/2016 13:53	NP
Surr: Dibromofluoromethane	101	83.6-123		%REC	233243	1	11/18/2016 13:53	NP
Surr: Toluene-d8	100	81.8-118		%REC	233243	1	11/18/2016 13:53	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Resolute Work Order Number 1611D75

Checklist completed by Pam Massoudi 11/15/16
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 0.6° Cooler #2 0.7° Cooler #3 0.4° Cooler #4 0.1° Cooler#5 0.6° Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes __ No ✓

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No ✓ pm 11/15/16

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by pm

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 23-Nov-16

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Lab Order: 1611D75

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D75-001A	SB-1-0-1	11/12/2016 8:00:00AM	Soil	VOLATILE ORGANICS: BTEX		11/17/2016 3:05:00 PM	11/17/2016
1611D75-001A	SB-1-0-1	11/12/2016 8:00:00AM	Soil	GASOLINE RANGE ORGANICS		11/17/2016 3:05:00 PM	11/17/2016
1611D75-001B	SB-1-0-1	11/12/2016 8:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-002A	GW-1-0-1	11/12/2016 8:00:00AM	Groundwater	VOLATILE ORGANICS: BTEX		11/16/2016 6:01:00 AM	11/17/2016
1611D75-002A	GW-1-0-1	11/12/2016 8:00:00AM	Groundwater	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/17/2016
1611D75-003A	SB-31-2-1-2	11/12/2016 8:30:00AM	Soil	TCL VOLATILE ORGANICS		11/17/2016 5:55:00 PM	11/18/2016
1611D75-003B	SB-31-2-1-2	11/12/2016 8:30:00AM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/17/2016 11:30:00 AM	11/21/2016
1611D75-003C	SB-31-2-1-2	11/12/2016 8:30:00AM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-003C	SB-31-2-1-2	11/12/2016 8:30:00AM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-003D	SB-31-2-1-2	11/12/2016 8:30:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-004A	GW-31-2	11/12/2016 8:30:00AM	Groundwater	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016
1611D75-004B	GW-31-2	11/12/2016 8:30:00AM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-004C	GW-31-2	11/12/2016 8:30:00AM	Groundwater	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-004C	GW-31-2	11/12/2016 8:30:00AM	Groundwater	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-005A	SB-31-1-1-2	11/12/2016 9:15:00AM	Soil	TCL VOLATILE ORGANICS		11/17/2016 5:55:00 PM	11/18/2016
1611D75-005B	SB-31-1-1-2	11/12/2016 9:15:00AM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/17/2016 11:30:00 AM	11/21/2016
1611D75-005C	SB-31-1-1-2	11/12/2016 9:15:00AM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-005C	SB-31-1-1-2	11/12/2016 9:15:00AM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-005D	SB-31-1-1-2	11/12/2016 9:15:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-006A	GW-31-1	11/12/2016 9:15:00AM	Groundwater	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016
1611D75-006B	GW-31-1	11/12/2016 9:15:00AM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-006C	GW-31-1	11/12/2016 9:15:00AM	Groundwater	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-006C	GW-31-1	11/12/2016 9:15:00AM	Groundwater	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-007A	SB-4-2-3	11/12/2016 10:00:00AM	Soil	VOLATILE ORGANICS: BTEX		11/17/2016 3:05:00 PM	11/18/2016
1611D75-007A	SB-4-2-3	11/12/2016 10:00:00AM	Soil	GASOLINE RANGE ORGANICS		11/17/2016 3:05:00 PM	11/18/2016
1611D75-007B	SB-4-2-3	11/12/2016 10:00:00AM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/17/2016 11:30:00 AM	11/21/2016
1611D75-007B	SB-4-2-3	11/12/2016 10:00:00AM	Soil	DIESEL RANGE ORGANICS		11/16/2016 10:00:00 AM	11/17/2016
1611D75-007C	SB-4-2-3	11/12/2016 10:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-008A	SB-5/12-2-3	11/12/2016 10:40:00AM	Soil	VOLATILE ORGANICS: BTEX		11/17/2016 3:05:00 PM	11/18/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Lab Order: 1611D75

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D75-008A	SB-5/12-2-3	11/12/2016 10:40:00AM	Soil	GASOLINE RANGE ORGANICS		11/17/2016 3:05:00 PM	11/18/2016
1611D75-008B	SB-5/12-2-3	11/12/2016 10:40:00AM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/18/2016 2:00:00 PM	11/18/2016
1611D75-008B	SB-5/12-2-3	11/12/2016 10:40:00AM	Soil	DIESEL RANGE ORGANICS		11/16/2016 10:00:00 AM	11/17/2016
1611D75-008C	SB-5/12-2-3	11/12/2016 10:40:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-008D	SB-5/12-2-3	11/12/2016 10:40:00AM	Soil	Laboratory Hydrogen Ion (pH)		11/21/2016 4:00:00 PM	11/22/2016
1611D75-009A	GW-5/12	11/12/2016 10:40:00AM	Groundwater	VOLATILE ORGANICS: BTEX		11/16/2016 6:01:00 AM	11/17/2016
1611D75-009A	GW-5/12	11/12/2016 10:40:00AM	Groundwater	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/17/2016
1611D75-009B	GW-5/12	11/12/2016 10:40:00AM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-009B	GW-5/12	11/12/2016 10:40:00AM	Groundwater	DIESEL RANGE ORGANICS		11/17/2016 2:30:00 PM	11/17/2016
1611D75-009C	GW-5/12	11/12/2016 10:40:00AM	Groundwater	Laboratory Hydrogen Ion (pH)			11/21/2016
1611D75-010A	SB-17-0-2	11/12/2016 4:15:00PM	Soil	TCL VOLATILE ORGANICS		11/17/2016 5:55:00 PM	11/18/2016
1611D75-010B	SB-17-0-2	11/12/2016 4:15:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/18/2016 2:00:00 PM	11/22/2016
1611D75-010C	SB-17-0-2	11/12/2016 4:15:00PM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-010C	SB-17-0-2	11/12/2016 4:15:00PM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-010D	SB-17-0-2	11/12/2016 4:15:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-011A	GW-17	11/12/2016 4:15:00PM	Groundwater	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016
1611D75-011B	GW-17	11/12/2016 4:15:00PM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-011C	GW-17	11/12/2016 4:15:00PM	Groundwater	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-011C	GW-17	11/12/2016 4:15:00PM	Groundwater	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-012A	FB-2	11/12/2016 5:10:00PM	Aqueous	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016
1611D75-012A	FB-2	11/12/2016 5:10:00PM	Aqueous	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/17/2016
1611D75-012B	FB-2	11/12/2016 5:10:00PM	Aqueous	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-012B	FB-2	11/12/2016 5:10:00PM	Aqueous	DIESEL RANGE ORGANICS		11/17/2016 2:30:00 PM	11/17/2016
1611D75-012C	FB-2	11/12/2016 5:10:00PM	Aqueous	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-012C	FB-2	11/12/2016 5:10:00PM	Aqueous	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-013A	RB-2	11/12/2016 5:20:00PM	Aqueous	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016
1611D75-013A	RB-2	11/12/2016 5:20:00PM	Aqueous	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/17/2016
1611D75-013B	RB-2	11/12/2016 5:20:00PM	Aqueous	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-013B	RB-2	11/12/2016 5:20:00PM	Aqueous	DIESEL RANGE ORGANICS		11/17/2016 2:30:00 PM	11/17/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Lab Order: 1611D75

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D75-013C	RB-2	11/12/2016 5:20:00PM	Aqueous	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-013C	RB-2	11/12/2016 5:20:00PM	Aqueous	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-014A	SB-10-0-1	11/13/2016 11:20:00AM	Soil	VOLATILE ORGANICS: BTEX		11/17/2016 3:05:00 PM	11/18/2016
1611D75-014A	SB-10-0-1	11/13/2016 11:20:00AM	Soil	GASOLINE RANGE ORGANICS		11/17/2016 3:05:00 PM	11/18/2016
1611D75-014B	SB-10-0-1	11/13/2016 11:20:00AM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/18/2016 2:00:00 PM	11/22/2016
1611D75-014B	SB-10-0-1	11/13/2016 11:20:00AM	Soil	DIESEL RANGE ORGANICS		11/16/2016 10:00:00 AM	11/17/2016
1611D75-014C	SB-10-0-1	11/13/2016 11:20:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-015A	GW-10	11/13/2016 11:20:00AM	Groundwater	VOLATILE ORGANICS: BTEX		11/16/2016 6:01:00 AM	11/17/2016
1611D75-015A	GW-10	11/13/2016 11:20:00AM	Groundwater	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/17/2016
1611D75-015B	GW-10	11/13/2016 11:20:00AM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-015B	GW-10	11/13/2016 11:20:00AM	Groundwater	DIESEL RANGE ORGANICS		11/17/2016 2:30:00 PM	11/17/2016
1611D75-016A	SB-8-0-1	11/13/2016 1:30:00PM	Soil	VOLATILE ORGANICS: BTEX		11/17/2016 3:05:00 PM	11/18/2016
1611D75-016A	SB-8-0-1	11/13/2016 1:30:00PM	Soil	GASOLINE RANGE ORGANICS		11/17/2016 3:05:00 PM	11/18/2016
1611D75-016B	SB-8-0-1	11/13/2016 1:30:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/18/2016 2:00:00 PM	11/22/2016
1611D75-016B	SB-8-0-1	11/13/2016 1:30:00PM	Soil	DIESEL RANGE ORGANICS		11/16/2016 10:00:00 AM	11/17/2016
1611D75-016C	SB-8-0-1	11/13/2016 1:30:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-017A	GW-8	11/13/2016 1:30:00PM	Groundwater	VOLATILE ORGANICS: BTEX		11/16/2016 6:01:00 AM	11/17/2016
1611D75-017A	GW-8	11/13/2016 1:30:00PM	Groundwater	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/17/2016
1611D75-017B	GW-8	11/13/2016 1:30:00PM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-017B	GW-8	11/13/2016 1:30:00PM	Groundwater	DIESEL RANGE ORGANICS		11/17/2016 2:30:00 PM	11/17/2016
1611D75-018A	SB-7-1-2	11/13/2016 2:10:00PM	Soil	VOLATILE ORGANICS: BTEX		11/17/2016 3:05:00 PM	11/18/2016
1611D75-018A	SB-7-1-2	11/13/2016 2:10:00PM	Soil	GASOLINE RANGE ORGANICS		11/17/2016 3:05:00 PM	11/18/2016
1611D75-018B	SB-7-1-2	11/13/2016 2:10:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/18/2016 2:00:00 PM	11/22/2016
1611D75-018B	SB-7-1-2	11/13/2016 2:10:00PM	Soil	DIESEL RANGE ORGANICS		11/16/2016 10:00:00 AM	11/17/2016
1611D75-018C	SB-7-1-2	11/13/2016 2:10:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-019A	SB-6-1-2	11/13/2016 3:55:00PM	Soil	VOLATILE ORGANICS: BTEX		11/17/2016 3:05:00 PM	11/18/2016
1611D75-019A	SB-6-1-2	11/13/2016 3:55:00PM	Soil	GASOLINE RANGE ORGANICS		11/17/2016 3:05:00 PM	11/18/2016
1611D75-019B	SB-6-1-2	11/13/2016 3:55:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/18/2016 2:00:00 PM	11/22/2016
1611D75-019B	SB-6-1-2	11/13/2016 3:55:00PM	Soil	DIESEL RANGE ORGANICS		11/16/2016 10:00:00 AM	11/17/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Lab Order: 1611D75

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D75-019C	SB-6-1-2	11/13/2016 3:55:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-020A	SB-16-5-6	11/13/2016 4:45:00PM	Soil	TCL VOLATILE ORGANICS		11/17/2016 5:55:00 PM	11/18/2016
1611D75-020B	SB-16-5-6	11/13/2016 4:45:00PM	Soil	POLYNUCLEAR AROMATIC HYDROCAR		11/18/2016 2:00:00 PM	11/22/2016
1611D75-020C	SB-16-5-6	11/13/2016 4:45:00PM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-020C	SB-16-5-6	11/13/2016 4:45:00PM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-020D	SB-16-5-6	11/13/2016 4:45:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-021A	GW-16-5-6	11/13/2016 4:45:00PM	Groundwater	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016
1611D75-021B	GW-16-5-6	11/13/2016 4:45:00PM	Groundwater	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-021C	GW-16-5-6	11/13/2016 4:45:00PM	Groundwater	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-021C	GW-16-5-6	11/13/2016 4:45:00PM	Groundwater	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-022A	FB-3	11/13/2016 5:20:00PM	Aqueous	TCL VOLATILE ORGANICS		11/16/2016 6:01:00 AM	11/21/2016
1611D75-022A	FB-3	11/13/2016 5:20:00PM	Aqueous	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/17/2016
1611D75-022B	FB-3	11/13/2016 5:20:00PM	Aqueous	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-022B	FB-3	11/13/2016 5:20:00PM	Aqueous	DIESEL RANGE ORGANICS		11/17/2016 2:30:00 PM	11/17/2016
1611D75-022C	FB-3	11/13/2016 5:20:00PM	Aqueous	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-022C	FB-3	11/13/2016 5:20:00PM	Aqueous	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-023A	RB-3	11/13/2016 5:30:00PM	Aqueous	TCL VOLATILE ORGANICS		11/16/2016 6:01:00 AM	11/21/2016
1611D75-023A	RB-3	11/13/2016 5:30:00PM	Aqueous	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/17/2016
1611D75-023B	RB-3	11/13/2016 5:30:00PM	Aqueous	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-023B	RB-3	11/13/2016 5:30:00PM	Aqueous	DIESEL RANGE ORGANICS		11/17/2016 2:30:00 PM	11/17/2016
1611D75-023C	RB-3	11/13/2016 5:30:00PM	Aqueous	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-023C	RB-3	11/13/2016 5:30:00PM	Aqueous	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-024A	SB-51-1-0-2	11/14/2016 8:00:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/16/2016 10:00:00 AM	11/18/2016
1611D75-024A	SB-51-1-0-2	11/14/2016 8:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-025A	SB-51-1-2-6	11/14/2016 8:02:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/16/2016 10:00:00 AM	11/18/2016
1611D75-025A	SB-51-1-2-6	11/14/2016 8:02:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-026A	SB-51-2-0-2	11/14/2016 8:30:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/16/2016 10:00:00 AM	11/18/2016
1611D75-026A	SB-51-2-0-2	11/14/2016 8:30:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-027A	SB-51-2-2-6	11/14/2016 8:32:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/16/2016 10:00:00 AM	11/18/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
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Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D75-027A	SB-51-2-2-6	11/14/2016 8:32:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-028A	SB-51-3-0-2	11/14/2016 9:00:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/16/2016 10:00:00 AM	11/18/2016
1611D75-028A	SB-51-3-0-2	11/14/2016 9:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-029A	SB-51-3-2-6	11/14/2016 9:02:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/16/2016 10:00:00 AM	11/18/2016
1611D75-029A	SB-51-3-2-6	11/14/2016 9:02:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-030A	SB-51-4-0-2	11/14/2016 9:35:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/18/2016
1611D75-030A	SB-51-4-0-2	11/14/2016 9:35:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-031A	SB-51-4-2-6	11/14/2016 9:37:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/18/2016
1611D75-031A	SB-51-4-2-6	11/14/2016 9:37:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-032A	SB-51-4-6-10	11/14/2016 9:39:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/18/2016
1611D75-032A	SB-51-4-6-10	11/14/2016 9:39:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-033A	SB-51-5-0-2	11/14/2016 10:30:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/18/2016
1611D75-033A	SB-51-5-0-2	11/14/2016 10:30:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-034A	SB-51-5-2-6	11/14/2016 10:32:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-034A	SB-51-5-2-6	11/14/2016 10:32:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-035A	SB-51-5-6-8	11/14/2016 10:34:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-035A	SB-51-5-6-8	11/14/2016 10:34:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-036A	SB-51-6-0-2	11/14/2016 11:00:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-036A	SB-51-6-0-2	11/14/2016 11:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-037A	SB-51-6-2-6	11/14/2016 11:02:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-037A	SB-51-6-2-6	11/14/2016 11:02:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-038A	SB-51-6-6-8	11/14/2016 11:04:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-038A	SB-51-6-6-8	11/14/2016 11:04:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-039A	SB-51-7-0-2	11/14/2016 11:30:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-039A	SB-51-7-0-2	11/14/2016 11:30:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-040A	SB-51-7-2-6	11/14/2016 11:32:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-040A	SB-51-7-2-6	11/14/2016 11:32:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-041A	SB-51-7-6-9	11/14/2016 11:34:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-041A	SB-51-7-6-9	11/14/2016 11:34:00AM	Soil	PERCENT MOISTURE			11/21/2016

Client: Resolute Env. & Water Resources Consulting, LLC
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Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D75-042A	SB-36-5-2-3.5	11/14/2016 1:50:00PM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-042A	SB-36-5-2-3.5	11/14/2016 1:50:00PM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-042A	SB-36-5-2-3.5	11/14/2016 1:50:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-043A	GW-36-5	11/14/2016 1:50:00PM	Groundwater	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-043A	GW-36-5	11/14/2016 1:50:00PM	Groundwater	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-044A	SB-27-2.4-3.7	11/14/2016 2:25:00PM	Soil	TCL VOLATILE ORGANICS		11/17/2016 5:55:00 PM	11/18/2016
1611D75-044B	SB-27-2.4-3.7	11/14/2016 2:25:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-045A	SB-36-6-2-3.5	11/14/2016 2:50:00PM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-045A	SB-36-6-2-3.5	11/14/2016 2:50:00PM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-045A	SB-36-6-2-3.5	11/14/2016 2:50:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-046A	GW-36-6	11/14/2016 2:50:00PM	Groundwater	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-046A	GW-36-6	11/14/2016 2:50:00PM	Groundwater	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-047A	SB-36-1-2.5-3.5	11/14/2016 3:15:00PM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-047A	SB-36-1-2.5-3.5	11/14/2016 3:15:00PM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-047A	SB-36-1-2.5-3.5	11/14/2016 3:15:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-048A	SB-DUP-1	11/14/2016 12:00:00AM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-048A	SB-DUP-1	11/14/2016 12:00:00AM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-048A	SB-DUP-1	11/14/2016 12:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-049A	SB-DUP-3	11/14/2016 12:00:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-049A	SB-DUP-3	11/14/2016 12:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-050A	SB-DUP-4	11/14/2016 12:00:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/21/2016
1611D75-050A	SB-DUP-4	11/14/2016 12:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-051A	SB-DUP-5	11/14/2016 12:00:00AM	Soil	TCL-SEMIVOLATILE ORGANICS		11/17/2016 1:00:00 PM	11/18/2016
1611D75-051A	SB-DUP-5	11/14/2016 12:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-052A	SB-36-2-	11/14/2016 3:40:00PM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-052A	SB-36-2-	11/14/2016 3:40:00PM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-052A	SB-36-2-	11/14/2016 3:40:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-053A	GW-36-2-	11/14/2016 3:40:00PM	Groundwater	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-053A	GW-36-2-	11/14/2016 3:40:00PM	Groundwater	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Lab Order: 1611D75

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D75-054A	SB-DUP-2-	11/14/2016 12:00:00AM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-054A	SB-DUP-2-	11/14/2016 12:00:00AM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-054A	SB-DUP-2-	11/14/2016 12:00:00AM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-055A	GW-DUP-2-	11/14/2016 12:00:00AM	Groundwater	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-055A	GW-DUP-2-	11/14/2016 12:00:00AM	Groundwater	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-056A	SB-36-3-2.6-3.6	11/14/2016 4:15:00PM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-056A	SB-36-3-2.6-3.6	11/14/2016 4:15:00PM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-056A	SB-36-3-2.6-3.6	11/14/2016 4:15:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-057A	SB-36-4-0-1	11/14/2016 4:45:00PM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-057A	SB-36-4-0-1	11/14/2016 4:45:00PM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-057A	SB-36-4-0-1	11/14/2016 4:45:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-058A	GW-36-4	11/14/2016 4:45:00PM	Groundwater	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-058A	GW-36-4	11/14/2016 4:45:00PM	Groundwater	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-059A	SB-36-9-0-1	11/14/2016 5:10:00PM	Soil	TOTAL METALS BY ICP		11/19/2016 10:30:00 AM	11/21/2016
1611D75-059A	SB-36-9-0-1	11/14/2016 5:10:00PM	Soil	MERCURY		11/16/2016 11:41:00 AM	11/16/2016
1611D75-059A	SB-36-9-0-1	11/14/2016 5:10:00PM	Soil	PERCENT MOISTURE			11/21/2016
1611D75-060A	FB-4	11/14/2016 6:00:00PM	Aqueous	TCL VOLATILE ORGANICS		11/16/2016 6:01:00 AM	11/21/2016
1611D75-060A	FB-4	11/14/2016 6:00:00PM	Aqueous	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/18/2016
1611D75-060B	FB-4	11/14/2016 6:00:00PM	Aqueous	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-060B	FB-4	11/14/2016 6:00:00PM	Aqueous	DIESEL RANGE ORGANICS		11/17/2016 2:30:00 PM	11/17/2016
1611D75-060C	FB-4	11/14/2016 6:00:00PM	Aqueous	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-060C	FB-4	11/14/2016 6:00:00PM	Aqueous	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-061A	RB-4	11/14/2016 6:10:00PM	Aqueous	TCL VOLATILE ORGANICS		11/16/2016 6:01:00 AM	11/21/2016
1611D75-061A	RB-4	11/14/2016 6:10:00PM	Aqueous	GASOLINE RANGE ORGANICS		11/16/2016 6:01:00 AM	11/18/2016
1611D75-061B	RB-4	11/14/2016 6:10:00PM	Aqueous	POLYNUCLEAR AROMATIC HYDROCAR		11/16/2016 12:50:17 PM	11/22/2016
1611D75-061B	RB-4	11/14/2016 6:10:00PM	Aqueous	DIESEL RANGE ORGANICS		11/17/2016 2:30:00 PM	11/17/2016
1611D75-061C	RB-4	11/14/2016 6:10:00PM	Aqueous	TOTAL METALS BY ICP		11/19/2016 11:15:00 AM	11/20/2016
1611D75-061C	RB-4	11/14/2016 6:10:00PM	Aqueous	TOTAL MERCURY		11/18/2016 10:26:00 AM	11/18/2016
1611D75-062A	TRIP BLANK #1	11/15/2016 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Lab Order: 1611D75

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D75-064A	TRIP BLANK #3	11/15/2016 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016
1611D75-065A	TRIP BLANK #4	11/15/2016 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016
1611D75-066A	TRIP BLANK #5	11/15/2016 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		11/18/2016 8:44:00 AM	11/18/2016

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 232963

Sample ID: **MB-232963** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **330004**
SampleType: **MBLK** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **232963** Analysis Date: **11/17/2016** Seq No: **7175321**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1´-Biphenyl	BRL	330									
2,4,5-Trichlorophenol	BRL	1700									
2,4,6-Trichlorophenol	BRL	330									
2,4-Dichlorophenol	BRL	330									
2,4-Dimethylphenol	BRL	330									
2,4-Dinitrophenol	BRL	1700									
2,4-Dinitrotoluene	BRL	330									
2,6-Dinitrotoluene	BRL	330									
2-Chloronaphthalene	BRL	330									
2-Chlorophenol	BRL	330									
2-Methylnaphthalene	BRL	330									
2-Methylphenol	BRL	330									
2-Nitroaniline	BRL	1700									
2-Nitrophenol	BRL	330									
3,3´-Dichlorobenzidine	BRL	670									
3-Nitroaniline	BRL	1700									
4,6-Dinitro-2-methylphenol	BRL	1700									
4-Bromophenyl phenyl ether	BRL	330									
4-Chloro-3-methylphenol	BRL	330									
4-Chloroaniline	BRL	330									
4-Chlorophenyl phenyl ether	BRL	330									
4-Methylphenol	BRL	330									
4-Nitroaniline	BRL	1700									
4-Nitrophenol	BRL	1700									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Acetophenone	BRL	330									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 232963

Sample ID: **MB-232963** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **330004**
SampleType: **MBLK** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **232963** Analysis Date: **11/17/2016** Seq No: **7175321**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	BRL	330									
Atrazine	BRL	330									
Benz(a)anthracene	BRL	330									
Benzaldehyde	BRL	330									
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Bis(2-chloroethoxy)methane	BRL	330									
Bis(2-chloroethyl)ether	BRL	330									
Bis(2-chloroisopropyl)ether	BRL	330									
Bis(2-ethylhexyl)phthalate	BRL	330									
Butyl benzyl phthalate	BRL	330									
Caprolactam	BRL	330									
Carbazole	BRL	330									
Chrysene	BRL	330									
Di-n-butyl phthalate	BRL	330									
Di-n-octyl phthalate	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Dibenzofuran	BRL	330									
Diethyl phthalate	BRL	330									
Dimethyl phthalate	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Hexachlorobenzene	BRL	330									
Hexachlorobutadiene	BRL	330									
Hexachlorocyclopentadiene	BRL	660									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 232963

Sample ID: **MB-232963** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **330004**
SampleType: **MBLK** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **232963** Analysis Date: **11/17/2016** Seq No: **7175321**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Hexachloroethane	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Isophorone	BRL	330									
N-Nitrosodi-n-propylamine	BRL	330									
N-Nitrosodiphenylamine	BRL	330									
Naphthalene	BRL	330									
Nitrobenzene	BRL	330									
Pentachlorophenol	BRL	1700									
Phenanthrene	BRL	330									
Phenol	BRL	330									
Pyrene	BRL	330									
Surr: 2,4,6-Tribromophenol	2745	0	3333		82.4	42.4	130				
Surr: 2-Fluorobiphenyl	1075	0	1667		64.5	51.5	120				
Surr: 2-Fluorophenol	2311	0	3333		69.3	41.1	120				
Surr: 4-Terphenyl-d14	1622	0	1667		97.3	52.7	117				
Surr: Nitrobenzene-d5	1320	0	1667		79.2	41.4	120				
Surr: Phenol-d5	2457	0	3333		73.7	47.6	120				

Sample ID: **LCS-232963** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **330263**
SampleType: **LCS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **232963** Analysis Date: **11/18/2016** Seq No: **7178700**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	2867	330	3333		86.0	64.8	117				
2-Chlorophenol	2848	330	3333		85.4	61.7	120				
4-Chloro-3-methylphenol	3062	330	3333		91.9	63.7	119				
4-Nitrophenol	2691	1700	3333		80.7	40.1	122				
Acenaphthene	2821	330	3333		84.6	69.6	120				
N-Nitrosodi-n-propylamine	3439	330	3333		103	61.5	132				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 232963

Sample ID: **LCS-232963** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **330263**
SampleType: **LCS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **232963** Analysis Date: **11/18/2016** Seq No: **7178700**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Pentachlorophenol	1731	1700	3333		51.9	40.2	121				
Phenol	2945	330	3333		88.4	52.8	120				
Pyrene	3078	330	3333		92.3	64	124				
Surr: 2,4,6-Tribromophenol	2942	0	3333		88.3	42.4	130				
Surr: 2-Fluorobiphenyl	1472	0	1667		88.3	51.5	120				
Surr: 2-Fluorophenol	2858	0	3333		85.7	41.1	120				
Surr: 4-Terphenyl-d14	1668	0	1667		100	52.7	117				
Surr: Nitrobenzene-d5	1599	0	1667		95.9	41.4	120				
Surr: Phenol-d5	3050	0	3333		91.5	47.6	120				

Sample ID: **1611D41-021AMS** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **330162**
SampleType: **MS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **232963** Analysis Date: **11/17/2016** Seq No: **7175572**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	2590	330	3333		77.7	49.2	120				
2-Chlorophenol	2751	330	3333		82.5	51.7	120				
4-Chloro-3-methylphenol	2860	330	3333		85.8	52.9	120				
4-Nitrophenol	2557	1700	3333		76.7	30.8	120				
Acenaphthene	2553	330	3333		76.6	52.2	120				
N-Nitrosodi-n-propylamine	2835	330	3333		85.1	51.7	125				
Pentachlorophenol	3431	1700	3333		103	39.4	120				
Phenol	2376	330	3333		71.3	45.4	120				
Pyrene	2760	330	3333		82.8	49.1	120				
Surr: 2,4,6-Tribromophenol	2967	0	3333		89.0	42.4	130				
Surr: 2-Fluorobiphenyl	1249	0	1667		74.9	51.5	120				
Surr: 2-Fluorophenol	2578	0	3333		77.3	41.1	120				
Surr: 4-Terphenyl-d14	1499	0	1667		89.9	52.7	117				
Surr: Nitrobenzene-d5	1319	0	1667		79.1	41.4	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 232963

Sample ID: **1611D41-021AMS** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **330162**
SampleType: **MS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **232963** Analysis Date: **11/17/2016** Seq No: **7175572**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Phenol-d5	2590	0	3333		77.7	47.6	120				

Sample ID: **1611D41-021AMSD** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **330162**
SampleType: **MSD** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **232963** Analysis Date: **11/17/2016** Seq No: **7175573**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	2677	330	3333		80.3	49.2	120	2590	3.29	23.4	
2-Chlorophenol	2801	330	3333		84.0	51.7	120	2751	1.78	29.9	
4-Chloro-3-methylphenol	2911	330	3333		87.3	52.9	120	2860	1.79	45.7	
4-Nitrophenol	2729	1700	3333		81.9	30.8	120	2557	6.52	30.8	
Acenaphthene	2643	330	3333		79.3	52.2	120	2553	3.48	24.4	
N-Nitrosodi-n-propylamine	2895	330	3333		86.9	51.7	125	2835	2.09	19.7	
Pentachlorophenol	3450	1700	3333		103	39.4	120	3431	0.533	26.5	
Phenol	2450	330	3333		73.5	45.4	120	2376	3.09	20.7	
Pyrene	2878	330	3333		86.3	49.1	120	2760	4.19	33.4	
Surr: 2,4,6-Tribromophenol	3161	0	3333		94.8	42.4	130	2967	0	0	
Surr: 2-Fluorobiphenyl	1278	0	1667		76.7	51.5	120	1249	0	0	
Surr: 2-Fluorophenol	2688	0	3333		80.6	41.1	120	2578	0	0	
Surr: 4-Terphenyl-d14	1554	0	1667		93.3	52.7	117	1499	0	0	
Surr: Nitrobenzene-d5	1380	0	1667		82.8	41.4	120	1319	0	0	
Surr: Phenol-d5	2687	0	3333		80.6	47.6	120	2590	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 232973

Sample ID: **MB-232973**	Client ID:			Units: **mg/Kg**	Prep Date: **11/16/2016**	Run No: **330063**
SampleType: **MBLK**	TestCode: **TOTAL MERCURY SW7471B**			BatchID: **232973**	Analysis Date: **11/16/2016**	Seq No: **7172987**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-232973**	Client ID:			Units: **mg/Kg**	Prep Date: **11/16/2016**	Run No: **330063**
SampleType: **LCS**	TestCode: **TOTAL MERCURY SW7471B**			BatchID: **232973**	Analysis Date: **11/16/2016**	Seq No: **7172990**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3993	0.100	0.4000		99.8	80	120				

Sample ID: **1611D75-010CMS**	Client ID: **SB-17-0-2**			Units: **mg/Kg-dry**	Prep Date: **11/16/2016**	Run No: **330063**
SampleType: **MS**	TestCode: **TOTAL MERCURY SW7471B**			BatchID: **232973**	Analysis Date: **11/16/2016**	Seq No: **7172993**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3950	0.103	0.4107	0.01703	92.0	70	130				

Sample ID: **1611D75-010CMSD**	Client ID: **SB-17-0-2**			Units: **mg/Kg-dry**	Prep Date: **11/16/2016**	Run No: **330063**
SampleType: **MSD**	TestCode: **TOTAL MERCURY SW7471B**			BatchID: **232973**	Analysis Date: **11/16/2016**	Seq No: **7172994**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3987	0.104	0.4156	0.01703	91.8	70	130	0.3950	0.947	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 232982

Sample ID: **MB-232982**	Client ID:			Units: **mg/Kg**	Prep Date: **11/16/2016**	Run No: **329995**
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **232982**	Analysis Date: **11/16/2016**	Seq No: **7172467**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.565	0	3.300		77.7	50.1	122				

Sample ID: **LCS-232982**	Client ID:			Units: **mg/Kg**	Prep Date: **11/16/2016**	Run No: **329995**
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **232982**	Analysis Date: **11/16/2016**	Seq No: **7172468**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	34.93	6.7	33.30	1.037	102	56.4	119				
Surr: Dioctylphthalate	2.971	0	3.330		89.2	50.1	122				

Sample ID: **1611D75-007BMS**	Client ID: **SB-4-2-3**			Units: **mg/Kg-dry**	Prep Date: **11/16/2016**	Run No: **330150**
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **232982**	Analysis Date: **11/17/2016**	Seq No: **7175345**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	35.79	7.1	35.22	2.164	95.5	43.6	123				
Surr: Dioctylphthalate	2.850	0	3.522		80.9	50.1	122				

Sample ID: **1611D75-007BMSD**	Client ID: **SB-4-2-3**			Units: **mg/Kg-dry**	Prep Date: **11/16/2016**	Run No: **330150**
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **232982**	Analysis Date: **11/17/2016**	Seq No: **7175347**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	38.27	7.1	35.22	2.164	103	43.6	123	35.79	6.70	25.7	
Surr: Dioctylphthalate	3.044	0	3.522		86.4	50.1	122	2.850	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233025

Sample ID: **MB-233025** Client ID: Units: **ug/L** Prep Date: **11/16/2016** Run No: **330128**
SampleType: **MBLK** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233025** Analysis Date: **11/17/2016** Seq No: **7175157**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	BRL	10									
2-Methylnaphthalene	BRL	10									
Acenaphthene	BRL	10									
Acenaphthylene	BRL	10									
Anthracene	BRL	10									
Benz(a)anthracene	BRL	10									
Benzo(a)pyrene	BRL	10									
Benzo(b)fluoranthene	BRL	10									
Benzo(g,h,i)perylene	BRL	10									
Benzo(k)fluoranthene	BRL	10									
Chrysene	BRL	10									
Dibenz(a,h)anthracene	BRL	10									
Fluoranthene	BRL	10									
Fluorene	BRL	10									
Indeno(1,2,3-cd)pyrene	BRL	10									
Naphthalene	BRL	10									
Phenanthrene	BRL	10									
Pyrene	BRL	10									
Surr: 2-Fluorobiphenyl	36.64	0	50.00		73.3	55.6	120				
Surr: 4-Terphenyl-d14	39.10	0	50.00		78.2	45.7	120				
Surr: Nitrobenzene-d5	37.99	0	50.00		76.0	56.9	120				

Sample ID: **LCS-233025** Client ID: Units: **ug/L** Prep Date: **11/16/2016** Run No: **330128**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233025** Analysis Date: **11/17/2016** Seq No: **7175158**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	37.31	10	50.00		74.6	67.6	120				
2-Methylnaphthalene	35.83	10	50.00		71.7	65.5	120				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233025

Sample ID: **LCS-233025** Client ID: Units: **ug/L** Prep Date: **11/16/2016** Run No: **330128**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233025** Analysis Date: **11/17/2016** Seq No: **7175158**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	41.09	10	50.00		82.2	70	120				
Acenaphthylene	40.23	10	50.00		80.5	70	120				
Anthracene	45.54	10	50.00		91.1	70	120				
Benz(a)anthracene	48.79	10	50.00		97.6	70	117				
Benzo(a)pyrene	47.75	10	50.00		95.5	70	117				
Benzo(b)fluoranthene	49.80	10	50.00		99.6	70	130				
Benzo(g,h,i)perylene	47.60	10	50.00		95.2	68.6	127				
Benzo(k)fluoranthene	43.92	10	50.00		87.8	70	120				
Chrysene	46.77	10	50.00		93.5	70	120				
Dibenz(a,h)anthracene	47.14	10	50.00		94.3	64.3	123				
Fluoranthene	47.93	10	50.00		95.9	70	120				
Fluorene	41.99	10	50.00		84.0	70	120				
Indeno(1,2,3-cd)pyrene	47.69	10	50.00		95.4	66.5	123				
Naphthalene	35.63	10	50.00		71.3	64.1	120				
Phenanthrene	45.29	10	50.00		90.6	70	120				
Pyrene	48.30	10	50.00		96.6	70	120				
Surr: 2-Fluorobiphenyl	36.14	0	50.00		72.3	55.6	120				
Surr: 4-Terphenyl-d14	44.42	0	50.00		88.8	45.7	120				
Surr: Nitrobenzene-d5	36.78	0	50.00		73.6	56.9	120				

Sample ID: **1611D65-002BMS** Client ID: Units: **ug/L** Prep Date: **11/16/2016** Run No: **330128**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233025** Analysis Date: **11/17/2016** Seq No: **7175356**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	38.68	10	50.00		77.4	57.6	120				
2-Methylnaphthalene	36.93	10	50.00		73.9	52.1	120				
Acenaphthene	42.45	10	50.00		84.9	56.5	119				
Acenaphthylene	40.62	10	50.00		81.2	60.6	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233025

Sample ID: **1611D65-002BMS** Client ID: Units: **ug/L** Prep Date: **11/16/2016** Run No: **330128**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233025** Analysis Date: **11/17/2016** Seq No: **7175356**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	44.89	10	50.00		89.8	60	121				
Benz(a)anthracene	46.36	10	50.00		92.7	70.9	122				
Benzo(a)pyrene	44.17	10	50.00		88.3	61.2	122				
Benzo(b)fluoranthene	48.65	10	50.00		97.3	66	133				
Benzo(g,h,i)perylene	43.27	10	50.00		86.5	59	131				
Benzo(k)fluoranthene	40.34	10	50.00		80.7	64	120				
Chrysene	44.55	10	50.00		89.1	70.8	120				
Dibenz(a,h)anthracene	42.60	10	50.00		85.2	55.5	127				
Fluoranthene	46.78	10	50.00		93.6	71.9	121				
Fluorene	42.24	10	50.00		84.5	64.4	118				
Indeno(1,2,3-cd)pyrene	43.99	10	50.00		88.0	58.1	128				
Naphthalene	37.97	10	50.00		75.9	51.3	120				
Phenanthrene	45.03	10	50.00		90.1	70.7	120				
Pyrene	47.08	10	50.00		94.2	60.9	123				
Surr: 2-Fluorobiphenyl	36.56	0	50.00		73.1	55.6	120				
Surr: 4-Terphenyl-d14	39.09	0	50.00		78.2	45.7	120				
Surr: Nitrobenzene-d5	39.30	0	50.00		78.6	56.9	120				

Sample ID: **1611D65-002BMSD** Client ID: Units: **ug/L** Prep Date: **11/16/2016** Run No: **330128**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233025** Analysis Date: **11/17/2016** Seq No: **7175539**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	38.89	10	50.00		77.8	57.6	120	38.68	0.541	23.3	
2-Methylnaphthalene	36.90	10	50.00		73.8	52.1	120	36.93	0.081	24	
Acenaphthene	40.90	10	50.00		81.8	56.5	119	42.45	3.72	20.7	
Acenaphthylene	41.03	10	50.00		82.1	60.6	120	40.62	1.00	20.5	
Anthracene	43.19	10	50.00		86.4	60	121	44.89	3.86	22.4	
Benz(a)anthracene	44.61	10	50.00		89.2	70.9	122	46.36	3.85	18.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233025

Sample ID: **1611D65-002BMSD** Client ID:
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D**
Units: **ug/L** Prep Date: **11/16/2016** Run No: **330128**
BatchID: **233025** Analysis Date: **11/17/2016** Seq No: **7175539**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(a)pyrene	42.91	10	50.00		85.8	61.2	122	44.17	2.89	22.2	
Benzo(b)fluoranthene	46.22	10	50.00		92.4	66	133	48.65	5.12	19.3	
Benzo(g,h,i)perylene	42.76	10	50.00		85.5	59	131	43.27	1.19	20.5	
Benzo(k)fluoranthene	39.92	10	50.00		79.8	64	120	40.34	1.05	19.7	
Chrysene	42.47	10	50.00		84.9	70.8	120	44.55	4.78	17.4	
Dibenz(a,h)anthracene	42.38	10	50.00		84.8	55.5	127	42.60	0.518	22.6	
Fluoranthene	44.85	10	50.00		89.7	71.9	121	46.78	4.21	20	
Fluorene	42.06	10	50.00		84.1	64.4	118	42.24	0.427	19.9	
Indeno(1,2,3-cd)pyrene	41.91	10	50.00		83.8	58.1	128	43.99	4.84	20.8	
Naphthalene	37.55	10	50.00		75.1	51.3	120	37.97	1.11	21.5	
Phenanthrene	43.18	10	50.00		86.4	70.7	120	45.03	4.19	20	
Pyrene	45.69	10	50.00		91.4	60.9	123	47.08	3.00	18.6	
Surr: 2-Fluorobiphenyl	36.12	0	50.00		72.2	55.6	120	36.56	0	0	
Surr: 4-Terphenyl-d14	37.74	0	50.00		75.5	45.7	120	39.09	0	0	
Surr: Nitrobenzene-d5	37.85	0	50.00		75.7	56.9	120	39.30	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233054

Sample ID: **MB-233054**	Client ID:				Units: **ug/L**		Prep Date: **11/16/2016**		Run No: **330026**	
SampleType: **MBLK**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233054**		Analysis Date: **11/16/2016**		Seq No: **7171993**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
m,p-Xylene	BRL	1.0									
o-Xylene	BRL	1.0									
Toluene	BRL	1.0									
Surr: 4-Bromofluorobenzene	39.06	0	50.00		78.1	70.1	126				

Sample ID: **MB-233054**	Client ID:				Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330032**	
SampleType: **MBLK**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233054**		Analysis Date: **11/16/2016**		Seq No: **7172044**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	BRL	0.50									
Surr: a.a.a-trifluorotoluene	0.05334	0	0.0500		107	75.1	120				

Sample ID: **LCS-233054**	Client ID:				Units: **ug/L**		Prep Date: **11/16/2016**		Run No: **330058**	
SampleType: **LCS**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233054**		Analysis Date: **11/16/2016**		Seq No: **7172925**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	55.59	1.0	50.00		111	74.9	123				
Ethylbenzene	56.47	1.0	50.00		113	79.3	125				
m,p-Xylene	112.6	1.0	100.0		113	79.7	127				
o-Xylene	54.70	1.0	50.00		109	77.1	128				
Toluene	55.86	1.0	50.00		112	75	124				
Surr: 4-Bromofluorobenzene	48.16	0	50.00		96.3	70.1	126				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233054

Sample ID: **LCS-233054** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330032**
SampleType: **LCS** TestCode: **GASOLINE RANGE ORGANICS SW8015C** BatchID: **233054** Analysis Date: **11/16/2016** Seq No: **7173030**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	1.128	0.50	1.000		113	69.9	126				
Surr: a.a.a-trifluorotoluene	0.05322	0	0.0500		106	75.1	120				

Sample ID: **1611A16-019AMS** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330032**
SampleType: **MS** TestCode: **GASOLINE RANGE ORGANICS SW8015C** BatchID: **233054** Analysis Date: **11/16/2016** Seq No: **7173031**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	1.570	0.50	1.000	0.3421	123	65.8	133				
Surr: a.a.a-trifluorotoluene	0.05871	0	0.0500		117	75.1	120				

Sample ID: **1611A16-019AMS** Client ID: Units: **ug/L** Prep Date: **11/16/2016** Run No: **330102**
SampleType: **MS** TestCode: **VOLATILE ORGANICS SW8260B** BatchID: **233054** Analysis Date: **11/16/2016** Seq No: **7174147**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	55.57	1.0	50.00	0.3400	110	70.1	132				
Ethylbenzene	59.25	1.0	50.00	0.2600	118	77.8	129				
m,p-Xylene	119.9	1.0	100.0	4.080	116	75.6	132				
o-Xylene	57.22	1.0	50.00	1.060	112	73.3	134				
Toluene	57.88	1.0	50.00	1.120	114	70.1	133				
Surr: 4-Bromofluorobenzene	50.50	0	50.00		101	70.1	126				

Sample ID: **1611A16-019AMSD** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330032**
SampleType: **MSD** TestCode: **GASOLINE RANGE ORGANICS SW8015C** BatchID: **233054** Analysis Date: **11/16/2016** Seq No: **7173032**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	1.482	0.50	1.000	0.3421	114	65.8	133	1.570	5.76	20	
Surr: a.a.a-trifluorotoluene	0.05413	0	0.0500		108	75.1	120	0.05871	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233054

Sample ID: **1611A16-019AMSD** Client ID:
SampleType: **MSD** TestCode: **VOLATILE ORGANICS SW8260B**
Units: **ug/L** Prep Date: **11/16/2016** Run No: **330102**
BatchID: **233054** Analysis Date: **11/16/2016** Seq No: **7174148**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	55.61	1.0	50.00	0.3400	111	70.1	132	55.57	0.072	20	
Ethylbenzene	59.03	1.0	50.00	0.2600	118	77.8	129	59.25	0.372	20	
m,p-Xylene	119.2	1.0	100.0	4.080	115	75.6	132	119.9	0.602	20	
o-Xylene	57.62	1.0	50.00	1.060	113	73.3	134	57.22	0.697	20	
Toluene	57.20	1.0	50.00	1.120	112	70.1	133	57.88	1.18	20	
Surr: 4-Bromofluorobenzene	51.79	0	50.00		104	70.1	126	50.50	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233078

Sample ID: **MB-233078** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **330125**
SampleType: **MBLK** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233078** Analysis Date: **11/17/2016** Seq No: **7174621**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	BRL	330									
2-Methylnaphthalene	BRL	330									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Anthracene	BRL	330									
Benz(a)anthracene	BRL	330									
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Chrysene	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Naphthalene	BRL	330									
Phenanthrene	BRL	330									
Pyrene	BRL	330									
Surr: 2-Fluorobiphenyl	1265	0	1667		75.9	56.7	120				
Surr: 4-Terphenyl-d14	1373	0	1667		82.4	60	120				
Surr: Nitrobenzene-d5	1405	0	1667		84.3	52.6	120				

Sample ID: **LCS-233078** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **329993**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233078** Analysis Date: **11/17/2016** Seq No: **7173780**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1334	330	1667		80.1	66.4	120				
2-Methylnaphthalene	1277	330	1667		76.6	64.8	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233078

Sample ID: **LCS-233078** Client ID: Units: **ug/Kg** Prep Date: **11/16/2016** Run No: **329993**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233078** Analysis Date: **11/17/2016** Seq No: **7173780**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1399	330	1667		83.9	70.1	120				
Acenaphthylene	1368	330	1667		82.1	68.5	120				
Anthracene	1455	330	1667		87.3	71.7	120				
Benz(a)anthracene	1528	330	1667		91.7	74.9	120				
Benzo(a)pyrene	1488	330	1667		89.3	64.3	120				
Benzo(b)fluoranthene	1691	330	1667		101	69.9	120				
Benzo(g,h,i)perylene	1478	330	1667		88.7	70.9	120				
Benzo(k)fluoranthene	1463	330	1667		87.8	67.3	120				
Chrysene	1477	330	1667		88.6	74.1	120				
Dibenz(a,h)anthracene	1474	330	1667		88.4	62.7	120				
Fluoranthene	1494	330	1667		89.7	74.6	120				
Fluorene	1375	330	1667		82.5	72.2	120				
Indeno(1,2,3-cd)pyrene	1469	330	1667		88.2	66.3	120				
Naphthalene	1267	330	1667		76.0	63.5	120				
Phenanthrene	1486	330	1667		89.2	73.5	120				
Pyrene	1496	330	1667		89.8	67.9	120				
Surr: 2-Fluorobiphenyl	1241	0	1667		74.4	56.7	120				
Surr: 4-Terphenyl-d14	1387	0	1667		83.2	60	120				
Surr: Nitrobenzene-d5	1284	0	1667		77.1	52.6	120				

Sample ID: **1611F83-021BMS** Client ID: Units: **ug/Kg-dry** Prep Date: **11/16/2016** Run No: **329993**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233078** Analysis Date: **11/17/2016** Seq No: **7174715**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1463	380	1931		75.8	61.1	120				
2-Methylnaphthalene	1429	380	1931		74.0	57.4	120				
Acenaphthene	1515	380	1931		78.5	60.2	120				
Acenaphthylene	1504	380	1931		77.9	59.9	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233078

Sample ID: **1611F83-021BMS** Client ID: Units: **ug/Kg-dry** Prep Date: **11/16/2016** Run No: **329993**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233078** Analysis Date: **11/17/2016** Seq No: **7174715**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	1570	380	1931		81.3	59.6	120				
Benz(a)anthracene	1641	380	1931		85.0	64.8	120				
Benzo(a)pyrene	1603	380	1931		83.1	56.1	120				
Benzo(b)fluoranthene	1759	380	1931		91.1	60	126				
Benzo(g,h,i)perylene	1565	380	1931		81.1	56.1	123				
Benzo(k)fluoranthene	1540	380	1931		79.8	55.2	120				
Chrysene	1556	380	1931		80.6	57.9	120				
Dibenz(a,h)anthracene	1524	380	1931		78.9	54.4	119				
Fluoranthene	1605	380	1931		83.1	58.3	119				
Fluorene	1483	380	1931		76.8	61.9	120				
Indeno(1,2,3-cd)pyrene	1550	380	1931		80.3	52.4	124				
Naphthalene	1422	380	1931		73.7	52.7	120				
Phenanthrene	1549	380	1931		80.2	57.7	120				
Pyrene	1589	380	1931		82.3	57.9	120				
Surr: 2-Fluorobiphenyl	1350	0	1931		69.9	56.7	120				
Surr: 4-Terphenyl-d14	1443	0	1931		74.7	60	120				
Surr: Nitrobenzene-d5	1416	0	1931		73.4	52.6	120				

Sample ID: **1611F83-021BMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **11/16/2016** Run No: **329993**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233078** Analysis Date: **11/17/2016** Seq No: **7174716**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1588	380	1931		82.3	61.1	120	1463	8.23	20	
2-Methylnaphthalene	1526	380	1931		79.0	57.4	120	1429	6.56	20.9	
Acenaphthene	1675	380	1931		86.8	60.2	120	1515	10.0	22.6	
Acenaphthylene	1642	380	1931		85.1	59.9	120	1504	8.79	26.3	
Anthracene	1668	380	1931		86.4	59.6	120	1570	6.08	24.5	
Benz(a)anthracene	1783	380	1931		92.3	64.8	120	1641	8.30	20.9	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233078

Sample ID: **1611F83-021BMSD** Client ID:
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D**
Units: **ug/Kg-dry** Prep Date: **11/16/2016** Run No: **329993**
BatchID: **233078** Analysis Date: **11/17/2016** Seq No: **7174716**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1720	380	1931		89.1	56.1	120	1603	7.04	21.1	
Benzo(b)fluoranthene	2030	380	1931		105	60	126	1759	14.3	23	
Benzo(g,h,i)perylene	1371	380	1931		71.0	56.1	123	1565	13.2	22.6	
Benzo(k)fluoranthene	1720	380	1931		89.1	55.2	120	1540	11.1	30	
Chrysene	1722	380	1931		89.2	57.9	120	1556	10.1	20.9	
Dibenz(a,h)anthracene	1439	380	1931		74.5	54.4	119	1524	5.71	26.9	
Fluoranthene	1778	380	1931		92.1	58.3	119	1605	10.2	26.6	
Fluorene	1660	380	1931		86.0	61.9	120	1483	11.3	23.8	
Indeno(1,2,3-cd)pyrene	1424	380	1931		73.7	52.4	124	1550	8.49	30.1	
Naphthalene	1534	380	1931		79.4	52.7	120	1422	7.55	22.1	
Phenanthrene	1682	380	1931		87.1	57.7	120	1549	8.27	25.8	
Pyrene	1756	380	1931		91.0	57.9	120	1589	9.97	25.2	
Surr: 2-Fluorobiphenyl	1488	0	1931		77.1	56.7	120	1350	0	0	
Surr: 4-Terphenyl-d14	1578	0	1931		81.7	60	120	1443	0	0	
Surr: Nitrobenzene-d5	1483	0	1931		76.8	52.6	120	1416	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233098

Sample ID: **MB-233098**	Client ID:				Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330243**
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233098**		Analysis Date: **11/17/2016**		Seq No: **7178069**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	BRL	0.20									
Surr: Dioctylphthalate	0.06967	0	0.1000		69.7	47	119				

Sample ID: **LCS-233098**	Client ID:				Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330243**
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233098**		Analysis Date: **11/17/2016**		Seq No: **7178070**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	1.074	0.20	1.000		107	51.3	122				
Surr: Dioctylphthalate	0.08794	0	0.1000		87.9	47	119				

Sample ID: **LCSD-233098**	Client ID:				Units: **mg/L**		Prep Date: **11/17/2016**		Run No: **330243**
SampleType: **LCSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**				BatchID: **233098**		Analysis Date: **11/17/2016**		Seq No: **7178071**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Diesel Range Organics	1.060	0.20	1.000		106	51.3	122	1.074	1.27	33.5	
Surr: Dioctylphthalate	0.09022	0	0.1000		90.2	47	119	0.08794	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233172

Sample ID: **MB-233172** Client ID: Units: **ug/Kg** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **MBLK** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181036**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	BRL	330									
2-Methylnaphthalene	BRL	330									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Anthracene	BRL	330									
Benz(a)anthracene	BRL	330									
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Chrysene	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Naphthalene	BRL	330									
Phenanthrene	BRL	330									
Pyrene	BRL	330									
Surr: 2-Fluorobiphenyl	1163	0	1667		69.8	56.7	120				
Surr: 4-Terphenyl-d14	1286	0	1667		77.2	60	120				
Surr: Nitrobenzene-d5	1275	0	1667		76.5	52.6	120				

Sample ID: **LCS-233172** Client ID: Units: **ug/Kg** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181037**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1203	330	1667		72.2	66.4	120				
2-Methylnaphthalene	1155	330	1667		69.3	64.8	120				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233172

Sample ID: **LCS-233172** Client ID: Units: **ug/Kg** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **LCS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181037**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1261	330	1667		75.6	70.1	120				
Acenaphthylene	1260	330	1667		75.6	68.5	120				
Anthracene	1257	330	1667		75.4	71.7	120				
Benz(a)anthracene	1344	330	1667		80.6	74.9	120				
Benzo(a)pyrene	1293	330	1667		77.6	64.3	120				
Benzo(b)fluoranthene	1490	330	1667		89.4	69.9	120				
Benzo(g,h,i)perylene	1333	330	1667		80.0	70.9	120				
Benzo(k)fluoranthene	1283	330	1667		77.0	67.3	120				
Chrysene	1303	330	1667		78.2	74.1	120				
Dibenz(a,h)anthracene	1327	330	1667		79.6	62.7	120				
Fluoranthene	1324	330	1667		79.4	74.6	120				
Fluorene	1259	330	1667		75.6	72.2	120				
Indeno(1,2,3-cd)pyrene	1325	330	1667		79.5	66.3	120				
Naphthalene	1209	330	1667		72.6	63.5	120				
Phenanthrene	1309	330	1667		78.5	73.5	120				
Pyrene	1314	330	1667		78.9	67.9	120				
Surr: 2-Fluorobiphenyl	1143	0	1667		68.6	56.7	120				
Surr: 4-Terphenyl-d14	1193	0	1667		71.6	60	120				
Surr: Nitrobenzene-d5	1141	0	1667		68.4	52.6	120				

Sample ID: **1611D75-008BMS** Client ID: **SB-5/12-2-3** Units: **ug/Kg-dry** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181039**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1556	390	1960		79.4	61.1	120				
2-Methylnaphthalene	1507	390	1960		76.9	57.4	120				
Acenaphthene	1639	390	1960		83.6	60.2	120				
Acenaphthylene	1601	390	1960		81.7	59.9	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233172

Sample ID: **1611D75-008BMS** Client ID: **SB-5/12-2-3** Units: **ug/Kg-dry** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **MS** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181039**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	1682	390	1960		85.8	59.6	120				
Benz(a)anthracene	1774	390	1960		90.5	64.8	120				
Benzo(a)pyrene	1730	390	1960		88.3	56.1	120				
Benzo(b)fluoranthene	1931	390	1960		98.5	60	126				
Benzo(g,h,i)perylene	1766	390	1960		90.1	56.1	123				
Benzo(k)fluoranthene	1682	390	1960		85.8	55.2	120				
Chrysene	1753	390	1960		89.4	57.9	120				
Dibenz(a,h)anthracene	1717	390	1960		87.6	54.4	119				
Fluoranthene	1796	390	1960		91.6	58.3	119				
Fluorene	1652	390	1960		84.3	61.9	120				
Indeno(1,2,3-cd)pyrene	1714	390	1960		87.4	52.4	124				
Naphthalene	1534	390	1960		78.2	52.7	120				
Phenanthrene	1704	390	1960		86.9	57.7	120				
Pyrene	1750	390	1960		89.3	57.9	120				
Surr: 2-Fluorobiphenyl	1460	0	1960		74.5	56.7	120				
Surr: 4-Terphenyl-d14	1609	0	1960		82.1	60	120				
Surr: Nitrobenzene-d5	1531	0	1960		78.1	52.6	120				

Sample ID: **1611D75-008BMSD** Client ID: **SB-5/12-2-3** Units: **ug/Kg-dry** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181040**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1-Methylnaphthalene	1551	390	1960		79.1	61.1	120	1556	0.303	20	
2-Methylnaphthalene	1485	390	1960		75.8	57.4	120	1507	1.49	20.9	
Acenaphthene	1623	390	1960		82.8	60.2	120	1639	0.937	22.6	
Acenaphthylene	1570	390	1960		80.1	59.9	120	1601	1.98	26.3	
Anthracene	1603	390	1960		81.8	59.6	120	1682	4.82	24.5	
Benz(a)anthracene	1685	390	1960		86.0	64.8	120	1774	5.15	20.9	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233172

Sample ID: **1611D75-008BMSD** Client ID: **SB-5/12-2-3** Units: **ug/Kg-dry** Prep Date: **11/18/2016** Run No: **330234**
SampleType: **MSD** TestCode: **POLYAROMATIC HYDROCARBONS SW8270D** BatchID: **233172** Analysis Date: **11/18/2016** Seq No: **7181040**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1594	390	1960		81.3	56.1	120	1730	8.21	21.1	
Benzo(b)fluoranthene	1825	390	1960		93.1	60	126	1931	5.66	23	
Benzo(g,h,i)perylene	1666	390	1960		85.0	56.1	123	1766	5.85	22.6	
Benzo(k)fluoranthene	1578	390	1960		80.5	55.2	120	1682	6.35	30	
Chrysene	1656	390	1960		84.5	57.9	120	1753	5.66	20.9	
Dibenz(a,h)anthracene	1625	390	1960		82.9	54.4	119	1717	5.49	26.9	
Fluoranthene	1690	390	1960		86.2	58.3	119	1796	6.07	26.6	
Fluorene	1537	390	1960		78.4	61.9	120	1652	7.23	23.8	
Indeno(1,2,3-cd)pyrene	1622	390	1960		82.8	52.4	124	1714	5.48	30.1	
Naphthalene	1527	390	1960		77.9	52.7	120	1534	0.436	22.1	
Phenanthrene	1616	390	1960		82.4	57.7	120	1704	5.31	25.8	
Pyrene	1639	390	1960		83.6	57.9	120	1750	6.57	25.2	
Surr: 2-Fluorobiphenyl	1496	0	1960		76.3	56.7	120	1460	0	0	
Surr: 4-Terphenyl-d14	1531	0	1960		78.1	60	120	1609	0	0	
Surr: Nitrobenzene-d5	1597	0	1960		81.5	52.6	120	1531	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233173

Sample ID: **MB-233173** Client ID: Units: **ug/Kg** Prep Date: **11/17/2016** Run No: **330295**
SampleType: **MBLK** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **233173** Analysis Date: **11/18/2016** Seq No: **7179524**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1´-Biphenyl	BRL	330									
2,4,5-Trichlorophenol	BRL	1700									
2,4,6-Trichlorophenol	BRL	330									
2,4-Dichlorophenol	BRL	330									
2,4-Dimethylphenol	BRL	330									
2,4-Dinitrophenol	BRL	1700									
2,4-Dinitrotoluene	BRL	330									
2,6-Dinitrotoluene	BRL	330									
2-Chloronaphthalene	BRL	330									
2-Chlorophenol	BRL	330									
2-Methylnaphthalene	BRL	330									
2-Methylphenol	BRL	330									
2-Nitroaniline	BRL	1700									
2-Nitrophenol	BRL	330									
3,3´-Dichlorobenzidine	BRL	670									
3-Nitroaniline	BRL	1700									
4,6-Dinitro-2-methylphenol	BRL	1700									
4-Bromophenyl phenyl ether	BRL	330									
4-Chloro-3-methylphenol	BRL	330									
4-Chloroaniline	BRL	330									
4-Chlorophenyl phenyl ether	BRL	330									
4-Methylphenol	BRL	330									
4-Nitroaniline	BRL	1700									
4-Nitrophenol	BRL	1700									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Acetophenone	BRL	330									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233173

Sample ID: **MB-233173** Client ID: Units: **ug/Kg** Prep Date: **11/17/2016** Run No: **330295**
SampleType: **MBLK** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **233173** Analysis Date: **11/18/2016** Seq No: **7179524**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	BRL	330									
Atrazine	BRL	330									
Benz(a)anthracene	BRL	330									
Benzaldehyde	BRL	330									
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Bis(2-chloroethoxy)methane	BRL	330									
Bis(2-chloroethyl)ether	BRL	330									
Bis(2-chloroisopropyl)ether	BRL	330									
Bis(2-ethylhexyl)phthalate	BRL	330									
Butyl benzyl phthalate	BRL	330									
Caprolactam	BRL	330									
Carbazole	BRL	330									
Chrysene	BRL	330									
Di-n-butyl phthalate	BRL	330									
Di-n-octyl phthalate	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Dibenzofuran	BRL	330									
Diethyl phthalate	BRL	330									
Dimethyl phthalate	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Hexachlorobenzene	BRL	330									
Hexachlorobutadiene	BRL	330									
Hexachlorocyclopentadiene	BRL	660									

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233173

Sample ID: **MB-233173** Client ID: Units: **ug/Kg** Prep Date: **11/17/2016** Run No: **330295**
SampleType: **MBLK** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **233173** Analysis Date: **11/18/2016** Seq No: **7179524**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Hexachloroethane	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Isophorone	BRL	330									
N-Nitrosodi-n-propylamine	BRL	330									
N-Nitrosodiphenylamine	BRL	330									
Naphthalene	BRL	330									
Nitrobenzene	BRL	330									
Pentachlorophenol	BRL	1700									
Phenanthrene	BRL	330									
Phenol	BRL	330									
Pyrene	BRL	330									
Surr: 2,4,6-Tribromophenol	2632	0	3333		79.0	42.4	130				
Surr: 2-Fluorobiphenyl	1322	0	1667		79.3	51.5	120				
Surr: 2-Fluorophenol	2579	0	3333		77.4	41.1	120				
Surr: 4-Terphenyl-d14	1415	0	1667		84.9	52.7	117				
Surr: Nitrobenzene-d5	1185	0	1667		71.1	41.4	120				
Surr: Phenol-d5	2498	0	3333		75.0	47.6	120				

Sample ID: **LCS-233173** Client ID: Units: **ug/Kg** Prep Date: **11/17/2016** Run No: **330295**
SampleType: **LCS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **233173** Analysis Date: **11/18/2016** Seq No: **7179525**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	2538	330	3333		76.2	64.8	117				
2-Chlorophenol	2355	330	3333		70.6	61.7	120				
4-Chloro-3-methylphenol	2549	330	3333		76.5	63.7	119				
4-Nitrophenol	BRL	1700	3333		50.5	40.1	122				
Acenaphthene	2542	330	3333		76.3	69.6	120				
N-Nitrosodi-n-propylamine	2368	330	3333		71.0	61.5	132				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233173

Sample ID: **LCS-233173** Client ID: Units: **ug/Kg** Prep Date: **11/17/2016** Run No: **330295**
SampleType: **LCS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **233173** Analysis Date: **11/18/2016** Seq No: **7179525**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Pentachlorophenol	2000	1700	3333		60.0	40.2	121				
Phenol	2207	330	3333		66.2	52.8	120				
Pyrene	2694	330	3333		80.8	64	124				
Surr: 2,4,6-Tribromophenol	2744	0	3333		82.3	42.4	130				
Surr: 2-Fluorobiphenyl	1352	0	1667		81.1	51.5	120				
Surr: 2-Fluorophenol	2232	0	3333		67.0	41.1	120				
Surr: 4-Terphenyl-d14	1492	0	1667		89.5	52.7	117				
Surr: Nitrobenzene-d5	1140	0	1667		68.4	41.4	120				
Surr: Phenol-d5	2308	0	3333		69.2	47.6	120				

Sample ID: **1611D75-051AMS** Client ID: **SB-DUP-5** Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330295**
SampleType: **MS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **233173** Analysis Date: **11/18/2016** Seq No: **7182043**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	2784	390	3939		70.7	49.2	120				
2-Chlorophenol	2718	390	3939		69.0	51.7	120				
4-Chloro-3-methylphenol	2786	390	3939		70.7	52.9	120				
4-Nitrophenol	BRL	2000	3939		50.6	30.8	120				
Acenaphthene	2787	390	3939		70.8	52.2	120				
N-Nitrosodi-n-propylamine	2629	390	3939		66.7	51.7	125				
Pentachlorophenol	2503	2000	3939		63.6	39.4	120				
Phenol	2458	390	3939		62.4	45.4	120				
Pyrene	2880	390	3939		73.1	49.1	120				
Surr: 2,4,6-Tribromophenol	2970	0	3939		75.4	42.4	130				
Surr: 2-Fluorobiphenyl	1435	0	1969		72.9	51.5	120				
Surr: 2-Fluorophenol	2484	0	3939		63.1	41.1	120				
Surr: 4-Terphenyl-d14	1566	0	1969		79.5	52.7	117				
Surr: Nitrobenzene-d5	1235	0	1969		62.7	41.4	120				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233173

Sample ID: **1611D75-051AMS** Client ID: **SB-DUP-5** Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330295**
SampleType: **MS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **233173** Analysis Date: **11/18/2016** Seq No: **7182043**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Phenol-d5	2536	0	3939		64.4	47.6	120				

Sample ID: **1611D75-051AMSD** Client ID: **SB-DUP-5** Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330295**
SampleType: **MSD** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **233173** Analysis Date: **11/18/2016** Seq No: **7182044**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	2844	390	3939		72.2	49.2	120	2784	2.14	23.4	
2-Chlorophenol	2792	390	3939		70.9	51.7	120	2718	2.72	29.9	
4-Chloro-3-methylphenol	2931	390	3939		74.4	52.9	120	2786	5.06	45.7	
4-Nitrophenol	2098	2000	3939		53.3	30.8	120	1992	5.22	30.8	
Acenaphthene	2845	390	3939		72.2	52.2	120	2787	2.06	24.4	
N-Nitrosodi-n-propylamine	2701	390	3939		68.6	51.7	125	2629	2.70	19.7	
Pentachlorophenol	2364	2000	3939		60.0	39.4	120	2503	5.70	26.5	
Phenol	2590	390	3939		65.8	45.4	120	2458	5.20	20.7	
Pyrene	2935	390	3939		74.5	49.1	120	2880	1.90	33.4	
Surr: 2,4,6-Tribromophenol	2998	0	3939		76.1	42.4	130	2970	0	0	
Surr: 2-Fluorobiphenyl	1472	0	1969		74.7	51.5	120	1435	0	0	
Surr: 2-Fluorophenol	2646	0	3939		67.2	41.1	120	2484	0	0	
Surr: 4-Terphenyl-d14	1635	0	1969		83.0	52.7	117	1566	0	0	
Surr: Nitrobenzene-d5	1307	0	1969		66.4	41.4	120	1235	0	0	
Surr: Phenol-d5	2666	0	3939		67.7	47.6	120	2536	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233182

Sample ID: **MB-233182**	Client ID:				Units: **mg/L**		Prep Date: **11/18/2016**		Run No: **330293**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **233182**		Analysis Date: **11/18/2016**		Seq No: **7179366**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-233182**	Client ID:				Units: **mg/L**		Prep Date: **11/18/2016**		Run No: **330293**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **233182**		Analysis Date: **11/18/2016**		Seq No: **7179367**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005123	0.00020	0.0050		102	80	120				

Sample ID: **1611D75-006CMS**	Client ID: **GW-31-1**				Units: **mg/L**		Prep Date: **11/18/2016**		Run No: **330293**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **233182**		Analysis Date: **11/18/2016**		Seq No: **7179369**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005246	0.00020	0.0050		105	70	130				

Sample ID: **1611D75-006CMSD**	Client ID: **GW-31-1**				Units: **mg/L**		Prep Date: **11/18/2016**		Run No: **330293**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **233182**		Analysis Date: **11/18/2016**		Seq No: **7179370**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005161	0.00020	0.0050		103	70	130	0.005246	1.65	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233202

Sample ID: **MB-233202**	Client ID:		Units: **ug/Kg**	Prep Date: **11/17/2016**	Run No: **330228**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233202**	Analysis Date: **11/17/2016**	Seq No: **7177765**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	100									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	10									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233202

Sample ID: **MB-233202**	Client ID:		Units: **ug/Kg**	Prep Date: **11/17/2016**	Run No: **330228**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233202**	Analysis Date: **11/17/2016**	Seq No: **7177765**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	20									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	10									
Surr: 4-Bromofluorobenzene	51.78	0	50.00		104	70	128				
Surr: Dibromofluoromethane	52.23	0	50.00		104	78.2	128				
Surr: Toluene-d8	48.98	0	50.00		98.0	76.5	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233202

Sample ID: **LCS-233202** Client ID: Units: **ug/Kg** Prep Date: **11/17/2016** Run No: **330228**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233202** Analysis Date: **11/17/2016** Seq No: **7177764**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	46.87	5.0	50.00		93.7	69.9	145				
Benzene	45.80	5.0	50.00		91.6	72.3	130				
Chlorobenzene	44.26	5.0	50.00		88.5	69	130				
Toluene	45.63	5.0	50.00		91.3	71.1	130				
Trichloroethene	42.45	5.0	50.00		84.9	71.7	136				
Surr: 4-Bromofluorobenzene	50.87	0	50.00		102	70	128				
Surr: Dibromofluoromethane	50.40	0	50.00		101	78.2	128				
Surr: Toluene-d8	49.38	0	50.00		98.8	76.5	116				

Sample ID: **1611C80-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330228**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233202** Analysis Date: **11/17/2016** Seq No: **7177766**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	46.54	5.5	54.74		85.0	56.6	151				
Benzene	48.49	5.5	54.74		88.6	70.4	130				
Chlorobenzene	47.48	5.5	54.74		86.7	67.5	132				
Toluene	48.61	5.5	54.74		88.8	70.4	130				
Trichloroethene	43.60	5.5	54.74		79.6	70.1	137				
Surr: 4-Bromofluorobenzene	54.92	0	54.74		100	70	128				
Surr: Dibromofluoromethane	54.57	0	54.74		99.7	78.2	128				
Surr: Toluene-d8	54.09	0	54.74		98.8	76.5	116				

Sample ID: **1611C80-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330228**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233202** Analysis Date: **11/17/2016** Seq No: **7177767**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	48.00	5.5	54.74		87.7	56.6	151	46.54	3.08	20.4	
Benzene	48.55	5.5	54.74		88.7	70.4	130	48.49	0.113	16.9	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233202

Sample ID: **1611C80-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330228**
BatchID: **233202** Analysis Date: **11/17/2016** Seq No: **7177767**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	48.05	5.5	54.74		87.8	67.5	132	47.48	1.19	14.6	
Toluene	50.37	5.5	54.74		92.0	70.4	130	48.61	3.56	16.6	
Trichloroethene	44.30	5.5	54.74		80.9	70.1	137	43.60	1.59	17	
Surr: 4-Bromofluorobenzene	53.82	0	54.74		98.3	70	128	54.92	0	0	
Surr: Dibromofluoromethane	53.08	0	54.74		97.0	78.2	128	54.57	0	0	
Surr: Toluene-d8	54.29	0	54.74		99.2	76.5	116	54.09	0	0	

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233234

Sample ID: **MB-233234**	Client ID:				Units: **ug/Kg**		Prep Date: **11/17/2016**		Run No: **330181**	
SampleType: **MBLK**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233234**		Analysis Date: **11/17/2016**		Seq No: **7177881**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
m,p-Xylene	BRL	1.0									
o-Xylene	BRL	1.0									
Toluene	BRL	1.0									
Surr: 4-Bromofluorobenzene	42.29	0	50.00		84.6	70	128				

Sample ID: **MB-233234**	Client ID:				Units: **mg/Kg**		Prep Date: **11/17/2016**		Run No: **330186**	
SampleType: **MBLK**	TestCode: **GASOLINE RANGE ORGANICS SW8015C**				BatchID: **233234**		Analysis Date: **11/17/2016**		Seq No: **7177962**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	BRL	0.50									
Surr: a.a.a-trifluorotoluene	0.05679	0	0.0500		114	69.8	134				

Sample ID: **LCS-233234**	Client ID:				Units: **ug/Kg**		Prep Date: **11/17/2016**		Run No: **330181**	
SampleType: **LCS**	TestCode: **VOLATILE ORGANICS SW8260B**				BatchID: **233234**		Analysis Date: **11/17/2016**		Seq No: **7177889**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.73	1.0	50.00		95.5	72.3	130				
Ethylbenzene	47.05	1.0	50.00		94.1	70.4	130				
m,p-Xylene	95.22	1.0	100.0		95.2	70.1	130				
o-Xylene	47.21	1.0	50.00		94.4	70.1	128				
Toluene	44.42	1.0	50.00		88.8	71.1	130				
Surr: 4-Bromofluorobenzene	42.56	0	50.00		85.1	70	128				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233234

Sample ID: **LCS-233234** Client ID: Units: **mg/Kg** Prep Date: **11/17/2016** Run No: **330186**
SampleType: **LCS** TestCode: **GASOLINE RANGE ORGANICS SW8015C** BatchID: **233234** Analysis Date: **11/17/2016** Seq No: **7177966**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	0.8303	0.50	1.000		83.0	68.9	129				
Surr: a.a.a-trifluorotoluene	0.05813	0	0.0500		116	69.8	134				

Sample ID: **1611C79-008AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330181**
SampleType: **MS** TestCode: **VOLATILE ORGANICS SW8260B** BatchID: **233234** Analysis Date: **11/17/2016** Seq No: **7177891**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	58.62	1.2	60.00		97.7	70.4	130				
Ethylbenzene	55.15	1.2	60.00		91.9	64.9	136				
m,p-Xylene	115.8	1.2	120.0		96.5	60.2	138				
o-Xylene	56.47	1.2	60.00		94.1	61.5	134				
Toluene	56.04	1.2	60.00		93.4	70.4	130				
Surr: 4-Bromofluorobenzene	54.37	0	60.00		90.6	70	128				

Sample ID: **1611C79-008AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **11/17/2016** Run No: **330186**
SampleType: **MS** TestCode: **GASOLINE RANGE ORGANICS SW8015C** BatchID: **233234** Analysis Date: **11/17/2016** Seq No: **7177968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	0.9411	0.60	1.200		78.4	61.1	134				
Surr: a.a.a-trifluorotoluene	0.06789	0	0.0600		113	69.8	134				

Sample ID: **1611C79-008AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330181**
SampleType: **MSD** TestCode: **VOLATILE ORGANICS SW8260B** BatchID: **233234** Analysis Date: **11/17/2016** Seq No: **7177892**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	58.27	1.2	60.00		97.1	70.4	130	58.62	0.595	16.9	
Ethylbenzene	53.99	1.2	60.00		90.0	64.9	136	55.15	2.13	16.3	
m,p-Xylene	112.7	1.2	120.0		93.9	60.2	138	115.8	2.73	16.3	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233234

Sample ID: **1611C79-008AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **11/17/2016** Run No: **330181**
SampleType: **MSD** TestCode: **VOLATILE ORGANICS SW8260B** BatchID: **233234** Analysis Date: **11/17/2016** Seq No: **7177892**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
o-Xylene	56.78	1.2	60.00		94.6	61.5	134	56.47	0.551	16.1	
Toluene	53.17	1.2	60.00		88.6	70.4	130	56.04	5.25	16.6	
Surr: 4-Bromofluorobenzene	56.75	0	60.00		94.6	70	128	54.37	0	0	

Sample ID: **1611C79-008AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/17/2016** Run No: **330186**
SampleType: **MSD** TestCode: **GASOLINE RANGE ORGANICS SW8015C** BatchID: **233234** Analysis Date: **11/17/2016** Seq No: **7177969**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Gasoline Range Organics)	0.9366	0.60	1.200		78.0	61.1	134	0.9411	0.481	20	
Surr: a.a.a-trifluorotoluene	0.06816	0	0.0600		114	69.8	134	0.06789	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233240

Sample ID: **MB-233240** Client ID: Units: **mg/Kg** Prep Date: **11/19/2016** Run No: **330426**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010D** BatchID: **233240** Analysis Date: **11/21/2016** Seq No: **7183675**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Cadmium	BRL	2.50									
Chromium	BRL	2.50									
Copper	BRL	2.50									
Lead	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									

Sample ID: **LCS-233240** Client ID: Units: **mg/Kg** Prep Date: **11/19/2016** Run No: **330426**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233240** Analysis Date: **11/21/2016** Seq No: **7183676**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	49.13	5.00	50.00		98.3	80	120				
Barium	49.24	5.00	50.00		98.5	80	120				
Cadmium	49.07	2.50	50.00		98.1	80	120				
Chromium	49.85	2.50	50.00	0.02703	99.6	80	120				
Copper	49.55	2.50	50.00		99.1	80	120				
Lead	48.73	5.00	50.00		97.5	80	120				
Selenium	48.61	5.00	50.00		97.2	80	120				
Silver	4.788	2.50	5.000		95.8	80	120				

Sample ID: **1611D75-003CMS** Client ID: **SB-31-2-1-2** Units: **mg/Kg-dry** Prep Date: **11/19/2016** Run No: **330426**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233240** Analysis Date: **11/21/2016** Seq No: **7183680**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	39.86	4.20	42.03		94.9	75	125				
Barium	42.38	4.20	42.03	2.674	94.5	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233240

Sample ID: **1611D75-003CMS**	Client ID: **SB-31-2-1-2**				Units: **mg/Kg-dry**	Prep Date: **11/19/2016**	Run No: **330426**
SampleType: **MS**	TestCode: **METALS, TOTAL** **SW6010D**				BatchID: **233240**	Analysis Date: **11/21/2016**	Seq No: **7183680**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cadmium	39.96	2.10	42.03		95.1	75	125				
Chromium	42.66	2.10	42.03	1.799	97.2	75	125				
Copper	42.18	2.10	42.03	1.306	97.3	75	125				
Lead	44.17	4.20	42.03	4.584	94.2	75	125				
Selenium	40.17	4.20	42.03		95.6	75	125				
Silver	3.917	2.10	4.203		93.2	75	125				

Sample ID: **1611D75-003CMSD**	Client ID: **SB-31-2-1-2**				Units: **mg/Kg-dry**	Prep Date: **11/19/2016**	Run No: **330426**
SampleType: **MSD**	TestCode: **METALS, TOTAL** **SW6010D**				BatchID: **233240**	Analysis Date: **11/21/2016**	Seq No: **7183681**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	40.37	4.25	42.46		95.1	75	125	39.86	1.27	20	
Barium	42.76	4.25	42.46	2.674	94.4	75	125	42.38	0.880	20	
Cadmium	40.60	2.12	42.46		95.6	75	125	39.96	1.58	20	
Chromium	43.25	2.12	42.46	1.799	97.6	75	125	42.66	1.36	20	
Copper	42.45	2.12	42.46	1.306	96.9	75	125	42.18	0.644	20	
Lead	44.43	4.25	42.46	4.584	93.9	75	125	44.17	0.590	20	
Selenium	40.36	4.25	42.46		95.1	75	125	40.17	0.472	20	
Silver	3.994	2.12	4.246		94.1	75	125	3.917	1.92	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233243

Sample ID: **MB-233243**	Client ID:		Units: **ug/L**	Prep Date: **11/18/2016**	Run No: **330242**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **233243**	Analysis Date: **11/18/2016**	Seq No: **7180594**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233243

Sample ID: **MB-233243** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330242**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233243** Analysis Date: **11/18/2016** Seq No: **7180594**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	45.91	0	50.00		91.8	66.1	129				
Surr: Dibromofluoromethane	50.83	0	50.00		102	83.6	123				
Surr: Toluene-d8	49.60	0	50.00		99.2	81.8	118				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233243

Sample ID: **LCS-233243** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330242**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233243** Analysis Date: **11/18/2016** Seq No: **7180593**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	54.12	5.0	50.00		108	68	139				
Benzene	51.59	5.0	50.00		103	74	125				
Chlorobenzene	48.90	5.0	50.00		97.8	75.7	123				
Toluene	52.85	5.0	50.00		106	75.9	126				
Trichloroethene	50.23	5.0	50.00		100	70.6	129				
Surr: 4-Bromofluorobenzene	46.23	0	50.00		92.5	66.1	129				
Surr: Dibromofluoromethane	50.45	0	50.00		101	83.6	123				
Surr: Toluene-d8	49.21	0	50.00		98.4	81.8	118				

Sample ID: **1611F44-001AMS** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330242**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233243** Analysis Date: **11/18/2016** Seq No: **7180602**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	562.1	50	500.0		112	64.3	149				
Benzene	523.0	50	500.0		105	71.6	132				
Chlorobenzene	497.7	50	500.0		99.5	73.1	126				
Toluene	539.2	50	500.0		108	72.5	135				
Trichloroethene	515.7	50	500.0		103	70.2	132				
Surr: 4-Bromofluorobenzene	455.3	0	500.0		91.1	66.1	129				
Surr: Dibromofluoromethane	492.7	0	500.0		98.5	83.6	123				
Surr: Toluene-d8	502.0	0	500.0		100	81.8	118				

Sample ID: **1611F44-001AMSD** Client ID: Units: **ug/L** Prep Date: **11/18/2016** Run No: **330242**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **233243** Analysis Date: **11/18/2016** Seq No: **7180603**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	547.9	50	500.0		110	64.3	149	562.1	2.56	30.8	
Benzene	512.8	50	500.0		103	71.6	132	523.0	1.97	20.7	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233243

Sample ID: **1611F44-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/L** Prep Date: **11/18/2016** Run No: **330242**
BatchID: **233243** Analysis Date: **11/18/2016** Seq No: **7180603**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	488.5	50	500.0		97.7	73.1	126	497.7	1.87	26.6	
Toluene	531.6	50	500.0		106	72.5	135	539.2	1.42	23.2	
Trichloroethene	504.6	50	500.0		101	70.2	132	515.7	2.18	27.7	
Surr: 4-Bromofluorobenzene	441.5	0	500.0		88.3	66.1	129	455.3	0	0	
Surr: Dibromofluoromethane	500.8	0	500.0		100	83.6	123	492.7	0	0	
Surr: Toluene-d8	498.1	0	500.0		99.6	81.8	118	502.0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233332

Sample ID: **MB-233332** Client ID: Units: **mg/L** Prep Date: **11/19/2016** Run No: **330338**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010D** BatchID: **233332** Analysis Date: **11/20/2016** Seq No: **7181337**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Selenium	BRL	0.0200									
Silver	BRL	0.0100									

Sample ID: **LCS-233332** Client ID: Units: **mg/L** Prep Date: **11/19/2016** Run No: **330338**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233332** Analysis Date: **11/20/2016** Seq No: **7181338**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	1.040	0.0500	1.000		104	80	120				
Barium	1.040	0.0200	1.000		104	80	120				
Cadmium	1.042	0.0050	1.000		104	80	120				
Chromium	1.031	0.0100	1.000		103	80	120				
Copper	1.037	0.0100	1.000		104	80	120				
Lead	1.037	0.0100	1.000		104	80	120				
Selenium	1.042	0.0200	1.000		104	80	120				
Silver	0.1043	0.0100	0.1000	0.0004648	104	80	120				

Sample ID: **1611F74-001AMS** Client ID: Units: **mg/L** Prep Date: **11/19/2016** Run No: **330338**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233332** Analysis Date: **11/20/2016** Seq No: **7181340**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	1.026	0.0500	1.000		103	75	125				
Barium	0.9897	0.0200	1.000	0.01036	97.9	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233332

Sample ID: **1611F74-001AMS** Client ID: Units: **mg/L** Prep Date: **11/19/2016** Run No: **330338**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010D** BatchID: **233332** Analysis Date: **11/20/2016** Seq No: **7181340**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cadmium	1.029	0.0050	1.000		103	75	125				
Chromium	0.9948	0.0100	1.000	0.001013	99.4	75	125				
Copper	1.010	0.0100	1.000	0.009022	100	75	125				
Lead	0.9791	0.0100	1.000		97.9	75	125				
Selenium	1.027	0.0200	1.000	0.01076	102	75	125				
Silver	0.1001	0.0100	0.1000	0.0003410	99.7	75	125				

Sample ID: **1611F74-001AMSD** Client ID: Units: **mg/L** Prep Date: **11/19/2016** Run No: **330338**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010D** BatchID: **233332** Analysis Date: **11/20/2016** Seq No: **7181341**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	1.021	0.0500	1.000		102	75	125	1.026	0.484	20	
Barium	0.9837	0.0200	1.000	0.01036	97.3	75	125	0.9897	0.617	20	
Cadmium	1.027	0.0050	1.000		103	75	125	1.029	0.231	20	
Chromium	0.9886	0.0100	1.000	0.001013	98.8	75	125	0.9948	0.621	20	
Copper	1.003	0.0100	1.000	0.009022	99.4	75	125	1.010	0.678	20	
Lead	0.9699	0.0100	1.000		97.0	75	125	0.9791	0.938	20	
Selenium	1.032	0.0200	1.000	0.01076	102	75	125	1.027	0.429	20	
Silver	0.09930	0.0100	0.1000	0.0003410	99.0	75	125	0.1001	0.784	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: 233463

Sample ID: **LCS-233463**	Client ID:		Units: **pH Units**	Prep Date: **11/21/2016**	Run No: **330465**
SampleType: **LCS**	TestCode: **Laboratory Hydrogen Ion (pH) SW9045D**		BatchID: **233463**	Analysis Date: **11/22/2016**	Seq No: **7184660**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.000	0.01	7.000		100	90	110				H

Sample ID: **1611D75-008DDUP**	Client ID: **SB-5/12-2-3**		Units: **pH Units**	Prep Date: **11/21/2016**	Run No: **330465**
SampleType: **DUP**	TestCode: **Laboratory Hydrogen Ion (pH) SW9045D**		BatchID: **233463**	Analysis Date: **11/22/2016**	Seq No: **7184671**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	6.190	0.01						6.210	0.323	10	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Resolute Env. & Water Resources Consulting, LLC
Project Name: Troutman Sanders Plant Kraft
Workorder: 1611D75

ANALYTICAL QC SUMMARY REPORT

BatchID: R330397

Sample ID: **LCS-R330397**	Client ID:		Units: **pH Units**	Prep Date:	Run No: **330397**
SampleType: **LCS**	TestCode: **Laboratory Hydrogen Ion (pH) SW9040C**		BatchID: **R330397**	Analysis Date: **11/21/2016**	Seq No: **7182678**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	6.950	0.01	7.000		99.3	90	110				

Sample ID: **1611D75-009CDUP**	Client ID: **GW-5/12**		Units: **pH Units**	Prep Date:	Run No: **330397**
SampleType: **DUP**	TestCode: **Laboratory Hydrogen Ion (pH) SW9040C**		BatchID: **R330397**	Analysis Date: **11/21/2016**	Seq No: **7182692**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	6.100	0.01						6.140	0.654	10	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive Atlanta GA 30340- 3906
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1703R09

Date: 3/29/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE BIN 10185 Atlanta, GA 30308
PHONE: 770-296-9648
FAX:
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)			REMARKS	No # of Containers
1	SS-02	3/29/17	0900		X	SO	X				
2	APCS-05	3/29/17	1315	X		SO		X			
3	ASTCS-06	3/29/17	1330	X		SO		X	X		
4	ASTCS-07	3/29/17	1335	X		SO		X	X		
5	ASTCS-08	3/29/17	1340	X		SO		X	X		
6											
7											
8											
9											
10											
11											
12											
13											
14											

PRESERVATION (See codes): 1 = EPA 6020 Arsenic only; 2 = EPA 6020 Arsenic Speciation; 3 = EPA 8015 TPH-DRO

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	3/29/17 1430	1: to Robert	3/30/17 1040
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Portsmouth GA
SEND REPORT TO: listed recipients
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

SPECIAL INSTRUCTIONS/COMMENTS:
stephen.wilson@Resolute-env.com
LLmillet@southernco.com
forrest.howard@resolute-env.com

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
☐ CLIENT ☒ FedEx ☐ UPS ☐ MAIL ☐ COURIER
☐ GREYHOUND ☐ OTHER

RECEIPT
Total # of Containers

Turnaround Time Request
☐ Standard 5 Business Days
☐ 2 Business Day Rush
☒ Next Business Day Rush
☐ Same Day Rush **(auth req.)**
☐ Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: ☐ I ☐ II ☐ III ☐ IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED WITH STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) WW=Wastewater DW=Drinking Water O = Other (specify)
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	SS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 9:00:00 AM
Lab ID:	1703R09-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**			
Arsenic	BRL	6.91		mg/Kg-dry	240283	1	03/31/2017 01:37	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.7	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1704917

Date: 4/11/17 Page 2 of 2

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308
PHONE: 770-296-9648
EMAIL: forrest.howard@Resolutenv.com
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	EPA 6020 Arsenic only	PRESERVATION (see codes): H	REMARKS	Number of Containers
1	55-03	4/11/17	1130		X	SO	X			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	4/11/17 1700	1. To fedex	
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen.wilson@Resolutenv.com
LL.millet.southernco.com
forrest.howard@Resolutenv.com

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Pentwentworth GA
SEND REPORT TO: in comments
INVOICE TO: ~~see comments~~ (FH)
(IF DIFFERENT FROM ABOVE)
GA Power Environmental affairs
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☒ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ☐ II ☐ III ☐ IV ☐

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 14-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	SS-03
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/11/2017 11:30:00 AM
Lab ID:	1704917-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**			
Arsenic	BRL	8.63		mg/Kg-dry	240900	1	04/12/2017 17:19	JS
PERCENT MOISTURE D2216								
Percent Moisture	14.3	0		wt%	R340535	1	04/12/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708898

Date: 8/8/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
PHONE: 770-296-9648	EMAIL: Forrest.Howard@Resultsenv.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	TCLP, RCRA Metals	PRESERVATION (see codes) I	REMARKS	Number of Containers
1	55-29	8/8/17	1300		X	SO	X	X		1
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/8/17 1730	1. To Fedex	
2.		2.	8/9/17 1133
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Trent Godwin
Forrest Howard
Lea Millet
Nick Herman

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Pentuarthath GA
SEND REPORT TO: In Comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
AES Fedex account used
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 1

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☒ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	SS-29
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 1:00:00 PM
Lab ID:	1708898-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
MERCURY, TCLP SW1311/7470A				**(SW7470A)**				
Mercury	BRL	0.00400		mg/L	246759	1	08/10/2017 15:52	AS
ICP METALS, TCLP SW1311/6010C				**(SW3010A)**				
Arsenic	BRL	0.250		mg/L	246755	1	08/10/2017 14:58	IO
Barium	BRL	0.500		mg/L	246755	1	08/10/2017 14:58	IO
Cadmium	BRL	0.0250		mg/L	246755	1	08/10/2017 14:58	IO
Chromium	BRL	0.0500		mg/L	246755	1	08/10/2017 14:58	IO
Lead	BRL	0.0500		mg/L	246755	1	08/10/2017 14:58	IO
Selenium	BRL	0.100		mg/L	246755	1	08/10/2017 14:58	IO
Silver	BRL	0.0250		mg/L	246755	1	08/10/2017 14:58	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 31, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1703R09

Analytical Environmental Services, Inc. received 5 samples on 3/30/2017 10:40:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive Atlanta GA 30340- 3906
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1703R09

Date: 3/29/17 Page 1 of 1

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE BIN 10185 Atlanta, GA 30308
PHONE: 770-296-9648
FAX:
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)			REMARKS	No # of Containers
1	SS-02	3/29/17	0900		X	SO	X				
2	APCS-05	3/29/17	1315	X		SO		X			
3	ASTCS-06	3/29/17	1330	X		SO		X	X		
4	ASTCS-07	3/29/17	1335	X		SO		X	X		
5	ASTCS-08	3/29/17	1340	X		SO		X	X		
6											
7											
8											
9											
10											
11											
12											
13											
14											

PRESERVATION (See codes): 1 = EPA 6020 Arsenic only; 2 = EPA 6020 Arsenic Speciation; 3 = EPA 8015 TPH-DRO

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	3/29/17 1430	1: to Robert	3/30/17 1040
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Portsmouth GA
SEND REPORT TO: listed recipients
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

SPECIAL INSTRUCTIONS/COMMENTS:
stephen.wilson@Resolute-env.com
LLmillet@southernco.com
forrest.howard@resolute-env.com

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
☐ CLIENT ☒ FedEx ☐ UPS ☐ MAIL ☐ COURIER
☐ GREYHOUND ☐ OTHER

RECEIPT
Total # of Containers

Turnaround Time Request
☐ Standard 5 Business Days
☐ 2 Business Day Rush
☒ Next Business Day Rush
☐ Same Day Rush **(auth req.)**
☐ Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: ☐ I ☐ II ☐ III ☐ IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED WITH STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) WW=Wastewater DW=Drinking Water O = Other (specify)
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	SS-02
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 9:00:00 AM
Lab ID:	1703R09-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**			
Arsenic	BRL	6.91		mg/Kg-dry	240283	1	03/31/2017 01:37	JR
PERCENT MOISTURE D2216								
Percent Moisture	14.7	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	APCS-05
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 1:15:00 PM
Lab ID:	1703R09-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.13		mg/Kg-dry	240283	1	03/31/2017 01:40	JR
Barium	14.8	0.48		mg/Kg-dry	240283	1	03/31/2017 18:44	JS
Beryllium	0.06	0.05		mg/Kg-dry	240283	1	03/31/2017 18:44	JS
PERCENT MOISTURE D2216								
Percent Moisture	8.14	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-06
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 1:30:00 PM
Lab ID:	1703R09-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	7.58		mg/Kg-dry	240283	1	03/31/2017 01:43	JR
Barium	137	1.01		mg/Kg-dry	240283	2	03/31/2017 19:16	JS
Beryllium	0.54	0.05		mg/Kg-dry	240283	1	03/31/2017 18:50	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.8		mg/Kg-dry	240302	1	03/30/2017 22:54	RF
Surr: Dioctylphthalate	84.6	54.5-121		%REC	240302	1	03/30/2017 22:54	RF
PERCENT MOISTURE D2216								
Percent Moisture	14.6	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-07
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 1:35:00 PM
Lab ID:	1703R09-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	10.2	6.93		mg/Kg-dry	240283	1	03/31/2017 16:03	JR
Barium	29.4	0.46		mg/Kg-dry	240283	1	03/31/2017 18:56	JS
Beryllium	0.29	0.05		mg/Kg-dry	240283	1	03/31/2017 18:56	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	7.9		mg/Kg-dry	240302	1	03/30/2017 22:07	RF
Surr: Dioctylphthalate	76.3	54.5-121		%REC	240302	1	03/30/2017 22:07	RF
PERCENT MOISTURE D2216								
Percent Moisture	15.2	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Mar-17

Client:	Georgia Power Company	**Client Sample ID:**	ASTCS-08
Project Name:	Plant Kraft Excavation	**Collection Date:**	3/29/2017 1:40:00 PM
Lab ID:	1703R09-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	6.48		mg/Kg-dry	240283	1	03/31/2017 01:50	JR
Barium	21.9	0.43		mg/Kg-dry	240283	1	03/31/2017 19:02	JS
Beryllium	0.17	0.04		mg/Kg-dry	240283	1	03/31/2017 19:02	JS
DIESEL RANGE ORGANICS SW8015C				**(SW3550C)**				
TPH (Diesel Range Organics)	BRL	8.3		mg/Kg-dry	240302	1	03/30/2017 22:31	RF
Surr: Dioctylphthalate	75.6	54.5-121		%REC	240302	1	03/30/2017 22:31	RF
PERCENT MOISTURE D2216								
Percent Moisture	19.4	0		wt%	R339759	1	03/31/2017 09:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1703R09

ANALYTICAL QC SUMMARY REPORT

BatchID: 240283

Sample ID: **MB-240283** Client ID: Units: **ug/Kg** Prep Date: **03/29/2017** Run No: **339650**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/30/2017** Seq No: **7428173**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									

Sample ID: **MB-240283** Client ID: Units: **ug/Kg** Prep Date: **03/29/2017** Run No: **339780**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/31/2017** Seq No: **7432285**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	BRL	500									
Beryllium	BRL	50.0									

Sample ID: **LCS-240283** Client ID: Units: **ug/Kg** Prep Date: **03/29/2017** Run No: **339650**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/30/2017** Seq No: **7428174**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5222	5000	5000		104	80	120				

Sample ID: **LCS-240283** Client ID: Units: **ug/Kg** Prep Date: **03/29/2017** Run No: **339780**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/31/2017** Seq No: **7432286**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	5020	500	5000		100	80	120				
Beryllium	4574	50.0	5000		91.5	80	120				

Sample ID: **1703P26-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **03/29/2017** Run No: **339650**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/30/2017** Seq No: **7428177**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.102	6.24	4.158	3.740	105	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1703R09

ANALYTICAL QC SUMMARY REPORT

BatchID: 240283

Sample ID: **1703P26-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **03/29/2017** Run No: **339780**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/31/2017** Seq No: **7432288**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	35.11	0.42	4.158	36.77	-40.0	75	125				S
Beryllium	4.128	0.04	4.158	0.2427	93.5	75	125				

Sample ID: **1703P26-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **03/29/2017** Run No: **339650**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/30/2017** Seq No: **7428178**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.741	6.25	4.169	3.740	120	75	125	8.102	7.59	20	

Sample ID: **1703P26-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **03/29/2017** Run No: **339780**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **240283** Analysis Date: **03/31/2017** Seq No: **7432289**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	41.24	0.42	4.169	36.77	107	75	125	35.11	16.1	20	
Beryllium	4.078	0.04	4.169	0.2427	92.0	75	125	4.128	1.22	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1703R09

ANALYTICAL QC SUMMARY REPORT

BatchID: 240302

Sample ID: **MB-240302**	Client ID:			Units: **mg/Kg**		Prep Date: **03/30/2017**		Run No: **339666**	
SampleType: **MBLK**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **240302**		Analysis Date: **03/30/2017**		Seq No: **7429770**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	BRL	6.7									
Surr: Dioctylphthalate	2.743	0	3.300		83.1	54.5	121				

Sample ID: **LCS-240302**	Client ID:			Units: **mg/Kg**		Prep Date: **03/30/2017**		Run No: **339666**	
SampleType: **LCS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **240302**		Analysis Date: **03/30/2017**		Seq No: **7429773**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	27.31	6.7	33.30		82.0	54.6	120				
Surr: Dioctylphthalate	2.626	0	3.330		78.9	54.5	121				

Sample ID: **1703Q30-004BMS**	Client ID:			Units: **mg/Kg-dry**		Prep Date: **03/30/2017**		Run No: **339666**	
SampleType: **MS**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **240302**		Analysis Date: **03/30/2017**		Seq No: **7429776**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	45.40	7.1	35.43	14.33	87.7	40.6	122				
Surr: Dioctylphthalate	2.748	0	3.543		77.6	54.5	121				

Sample ID: **1703Q30-004BMSD**	Client ID:			Units: **mg/Kg-dry**		Prep Date: **03/30/2017**		Run No: **339666**	
SampleType: **MSD**	TestCode: **DIESEL RANGE ORGANICS SW8015C**			BatchID: **240302**		Analysis Date: **03/30/2017**		Seq No: **7429777**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
TPH (Diesel Range Organics)	46.80	7.1	35.43	14.33	91.6	40.6	122	45.40	3.03	29.9	
Surr: Dioctylphthalate	3.010	0	3.543		85.0	54.5	121	2.748	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

April 14, 2017

Leah Millet
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

TEL: (404) 506-1367
FAX: (404) 506-1499

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1704917

Analytical Environmental Services, Inc. received 1 samples on 4/12/2017 7:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

Tyrel Heckendorf
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1704917

Date: 4/11/17 Page 2 of 2

COMPANY: Georgia Power Company
ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308
PHONE: 770-296-9648
EMAIL: forrest.howard@Resolutenv.com
SAMPLED BY: Forrest Howard
SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	EPA 6020 Arsenic only	PRESERVATION (see codes): H	REMARKS	Number of Containers
1	55-03	4/11/17	1130		X	SO	X			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	4/11/17 1700	1. To fedex	
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen.wilson@Resolutenv.com
LL.millet.southernco.com
forrest.howard@Resolutenv.com

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Pentwentworth GA
SEND REPORT TO: in comments
INVOICE TO: ~~see comments~~ (FH)
(IF DIFFERENT FROM ABOVE)
GA Power Environmental affairs
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☒ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ☐ II ☐ III ☐ IV ☐

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 14-Apr-17

Client:	Georgia Power Company	**Client Sample ID:**	SS-03
Project Name:	Plant Kraft Excavation	**Collection Date:**	4/11/2017 11:30:00 AM
Lab ID:	1704917-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B					**(SW3050B)**			
Arsenic	BRL	8.63		mg/Kg-dry	240900	1	04/12/2017 17:19	JS
PERCENT MOISTURE D2216								
Percent Moisture	14.3	0		wt%	R340535	1	04/12/2017 08:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted?	○	○	○		

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1704917

ANALYTICAL QC SUMMARY REPORT

BatchID: 240900

Sample ID: **MB-240900**	Client ID:					Units: **ug/Kg**		Prep Date: **04/12/2017**		Run No: **340568**	
SampleType: **MBLK**	TestCode: **Metals by ICP/MS SW6020B**					BatchID: **240900**		Analysis Date: **04/12/2017**		Seq No: **7453501**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	7500									

Sample ID: **LCS-240900**	Client ID:					Units: **ug/Kg**		Prep Date: **04/12/2017**		Run No: **340568**	
SampleType: **LCS**	TestCode: **Metals by ICP/MS SW6020B**					BatchID: **240900**		Analysis Date: **04/12/2017**		Seq No: **7453502**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4317	1000	5000	199.8	82.3	80	120				

Sample ID: **1704917-001AMS**	Client ID: **SS-03**					Units: **mg/Kg-dry**		Prep Date: **04/12/2017**		Run No: **340568**	
SampleType: **MS**	TestCode: **Metals by ICP/MS SW6020B**					BatchID: **240900**		Analysis Date: **04/12/2017**		Seq No: **7453504**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7.694	7.69	5.492	2.373	96.9	75	125				

Sample ID: **1704917-001AMSD**	Client ID: **SS-03**					Units: **mg/Kg-dry**		Prep Date: **04/12/2017**		Run No: **340568**	
SampleType: **MSD**	TestCode: **Metals by ICP/MS SW6020B**					BatchID: **240900**		Analysis Date: **04/12/2017**		Seq No: **7453505**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	7.405	7.32	5.230	2.373	96.2	75	125	7.694	3.83	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 10, 2017

Leah Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft Excavation

Dear Leah Millet: Order No: 1708898

Analytical Environmental Services, Inc. received 1 samples on 8/9/2017 11:30:00 AM
for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms and E. coli, effective 04/25/17-04/24/20.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Tyrel Heckendorf

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1708898

Date: 8/8/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta GA 30308
PHONE: 770-296-9648	EMAIL: Forrest.Howard@Resultsenv.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	TCLP, RCRA Metals	PRESERVATION (see codes) I	REMARKS	Number of Containers
1	55-29	8/8/17	1300		X	SO	X	X		1
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	8/8/17 1730	1. To Fedex	
2.		2.	8/9/17 1133
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: Report to:
Stephen Wilson
Trent Godwin
Forrest Howard
Lea Millet
Nick Herman

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Pentuarthath GA
SEND REPORT TO: In Comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
AES Fedex account used
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 1

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☒ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 15-Aug-17

Client: Georgia Power Company
Project: Plant Kraft Excavation
Lab ID: 1708898

Case Narrative

Due to the prep requirements of EPA method 1311 TCLP, the sample was analyzed on a next day TAT.

Analytical Environmental Services, Inc **Date:** 10-Aug-17

Client:	Georgia Power Company	**Client Sample ID:**	SS-29
Project Name:	Plant Kraft Excavation	**Collection Date:**	8/8/2017 1:00:00 PM
Lab ID:	1708898-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
MERCURY, TCLP SW1311/7470A				**(SW7470A)**				
Mercury	BRL	0.00400		mg/L	246759	1	08/10/2017 15:52	AS
ICP METALS, TCLP SW1311/6010C				**(SW3010A)**				
Arsenic	BRL	0.250		mg/L	246755	1	08/10/2017 14:58	IO
Barium	BRL	0.500		mg/L	246755	1	08/10/2017 14:58	IO
Cadmium	BRL	0.0250		mg/L	246755	1	08/10/2017 14:58	IO
Chromium	BRL	0.0500		mg/L	246755	1	08/10/2017 14:58	IO
Lead	BRL	0.0500		mg/L	246755	1	08/10/2017 14:58	IO
Selenium	BRL	0.100		mg/L	246755	1	08/10/2017 14:58	IO
Silver	BRL	0.0250		mg/L	246755	1	08/10/2017 14:58	IO

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GA POWER CO** AES Work Order Number: **1704918**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	○	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	○	○		
5.	Custody seals intact on shipping container?	○	○	○		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	○	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	○	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	○	○	○		
10.	Sampler name and/or signature on COC?	○	○	○		
11.	Were all samples received within holding time?	○	○	○		
12.	TAT marked on the COC?	○	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature 5.3 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). TD 4/12/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	○	○		
17.	Custody seals present on sample containers?	○	○	○		
18.	Custody seals intact on sample containers?	○	○	○		
19.	Do sample container labels match the COC?	○	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	○	○	○		
21.	Were all of the samples listed on the COC received?	○	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	○	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	○	○	○		
24.	Were samples received in appropriate containers?	○	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	○		
26.	Were trip blanks submitted?	○	○	○	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). TD 4/12/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	○		
29.	Containers meet preservation guidelines?	○	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	○		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). TD 4/12/17

Checklist 1/19/17 Rev 0.

Locked

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708898

ANALYTICAL QC SUMMARY REPORT

BatchID: 246755

Sample ID: **MB-246755** Client ID: Units: **mg/L** Prep Date: **08/10/2017** Run No: **349497**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **246755** Analysis Date: **08/10/2017** Seq No: **7680056**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **LCS-246755** Client ID: Units: **mg/L** Prep Date: **08/10/2017** Run No: **349497**
SampleType: **LCS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **246755** Analysis Date: **08/10/2017** Seq No: **7680058**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.903	0.250	5.000		98.1	80	120				
Barium	4.573	0.500	5.000		91.5	80	120				
Cadmium	4.754	0.0250	5.000		95.1	80	120				
Chromium	4.664	0.0500	5.000		93.3	80	120				
Lead	4.548	0.0500	5.000		91.0	80	120				
Selenium	4.962	0.100	5.000		99.2	80	120				
Silver	0.4620	0.0250	0.5000		92.4	80	120				

Sample ID: **1702I59-014BMS** Client ID: Units: **mg/L** Prep Date: **08/10/2017** Run No: **349497**
SampleType: **MS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **246755** Analysis Date: **08/10/2017** Seq No: **7680063**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.824	0.250	5.000		96.5	50	150				
Barium	4.968	0.500	5.000	0.4228	90.9	50	150				
Cadmium	4.667	0.0250	5.000		93.3	50	150				
Chromium	4.582	0.0500	5.000		91.6	50	150				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708898

ANALYTICAL QC SUMMARY REPORT

BatchID: 246755

Sample ID: **1702I59-014BMS** Client ID:
SampleType: **MS** TestCode: **ICP METALS, TCLP SW1311/6010C**
Units: **mg/L** Prep Date: **08/10/2017** Run No: **349497**
BatchID: **246755** Analysis Date: **08/10/2017** Seq No: **7680063**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	4.446	0.0500	5.000		88.9	50	150				
Selenium	4.869	0.100	5.000		97.4	50	150				
Silver	0.4539	0.0250	0.5000		90.8	50	150				

Sample ID: **1702I59-014BMSD** Client ID:
SampleType: **MSD** TestCode: **ICP METALS, TCLP SW1311/6010C**
Units: **mg/L** Prep Date: **08/10/2017** Run No: **349497**
BatchID: **246755** Analysis Date: **08/10/2017** Seq No: **7680066**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.939	0.250	5.000		98.8	50	150	4.824	2.35	30	
Barium	5.020	0.500	5.000	0.4228	92.0	50	150	4.968	1.04	30	
Cadmium	4.754	0.0250	5.000		95.1	50	150	4.667	1.84	30	
Chromium	4.660	0.0500	5.000		93.2	50	150	4.582	1.69	30	
Lead	4.573	0.0500	5.000		91.5	50	150	4.446	2.81	30	
Selenium	5.018	0.100	5.000		100	50	150	4.869	3.00	30	
Silver	0.4610	0.0250	0.5000		92.2	50	150	0.4539	1.56	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft Excavation
Workorder: 1708898

ANALYTICAL QC SUMMARY REPORT

BatchID: 246759

Sample ID: **MB-246759**	Client ID:					Units: **mg/L**		Prep Date: **08/10/2017**		Run No: **349516**	
SampleType: **MBLK**	TestCode: **MERCURY, TCLP SW1311/7470A**					BatchID: **246759**		Analysis Date: **08/10/2017**		Seq No: **7680579**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00400									

Sample ID: **LCS-246759**	Client ID:					Units: **mg/L**		Prep Date: **08/10/2017**		Run No: **349516**	
SampleType: **LCS**	TestCode: **MERCURY, TCLP SW1311/7470A**					BatchID: **246759**		Analysis Date: **08/10/2017**		Seq No: **7680582**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.04090	0.00400	0.0400	0.0006625	101	80	120				

Sample ID: **1708396-001AMS**	Client ID:					Units: **mg/L**		Prep Date: **08/10/2017**		Run No: **349516**	
SampleType: **MS**	TestCode: **MERCURY, TCLP SW1311/7470A**					BatchID: **246759**		Analysis Date: **08/10/2017**		Seq No: **7680585**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.04150	0.00400	0.0400		104	80	120				

Sample ID: **1708396-001AMSD**	Client ID:					Units: **mg/L**		Prep Date: **08/10/2017**		Run No: **349516**	
SampleType: **MSD**	TestCode: **MERCURY, TCLP SW1311/7470A**					BatchID: **246759**		Analysis Date: **08/10/2017**		Seq No: **7680586**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.04244	0.00400	0.0400		106	80	120	0.04150	2.23	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1705A42

Date: 5/10/17 Page 1 of 1

COMPANY: Georgia Power Company	ADDRESS: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308
PHONE: 770-286-9648	FAX: Forrest.howard@Resolutionva.com
SAMPLED BY: Forrest Howard	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	EPA 6020 HSRA metals	EPA 6020 As, Ba, Be	No # of Containers	REMARKS
	PRESERVATION (See codes)						I	I		
1	MR-01	5/10/17	1015		X	SO	X			
2	EAPCS-14	5/10/17	1350	X		SO		X		
3	EA PCS-15	5/10/17	1355	X		SO		X		
4	~~(H) APCS-04~~ APCS-19A	5/10/17	1510	X		SO		X		
5										
6										
7										
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9										
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11										
12										
13										
14										

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1:	5/10/17 1730	1: To FedEx	
2:		2: Alex Lodge	5/11/17
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Plant Kraft Excavation
PROJECT #:
SITE ADDRESS: Plant Kraft, Port Wentworth GA
SEND REPORT TO: in comments
INVOICE TO: GPC Environmental Affairs
(IF DIFFERENT FROM ABOVE)
sent w/ AES FedEx account
QUOTE #: PO#:

RECEIPT

Total # of Containers

Turnaround Time Request

- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☒ Next Business Day Rush
- ☐ Same Day Rush (auth req.)
- ☐ Other

STATE PROGRAM (if any):
E-mail? Fax?
DATA PACKAGE: I ○ II ○ III ○ IV ○

SPECIAL INSTRUCTIONS/COMMENTS: Report to: Stephen Wilson, Forrest Howard, Lee Millet, Nicki Hyman (HSRA Metals Attached)

SHIPMENT METHOD:
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 15-May-17

Client:	Georgia Power Company	**Client Sample ID:**	MR-01
Project Name:	Plant Kraft Excavation	**Collection Date:**	5/10/2017 10:15:00 AM
Lab ID:	1705A42-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	0.561	0.101		mg/Kg-dry	242504	1	05/12/2017 16:17	AS
Metals by ICP/MS SW6020B					**(SW3050B)**			
Antimony	0.73	0.64		mg/Kg-dry	242467	5	05/12/2017 15:09	JR
Arsenic	161	63.7		mg/Kg-dry	242467	50	05/12/2017 16:30	JR
Barium	140	0.42		mg/Kg-dry	242467	5	05/12/2017 15:09	JR
Beryllium	0.69	0.04		mg/Kg-dry	242467	5	05/12/2017 15:09	JR
Cadmium	0.07	0.04		mg/Kg-dry	242467	5	05/12/2017 15:09	JR
Chromium	13.3	4.24		mg/Kg-dry	242467	5	05/12/2017 15:09	JR
Copper	24.4	0.42		mg/Kg-dry	242467	5	05/12/2017 19:09	JR
Lead	23.6	0.21		mg/Kg-dry	242467	5	05/12/2017 15:09	JR
Nickel	8.99	1.06		mg/Kg-dry	242467	5	05/12/2017 19:09	JR
Selenium	6.78	1.06		mg/Kg-dry	242467	5	05/12/2017 15:09	JR
Silver	0.05	0.04		mg/Kg-dry	242467	5	05/12/2017 19:09	JR
Thallium	1.67	0.21		mg/Kg-dry	242467	5	05/12/2017 15:09	JR
Zinc	59.4	2.12		mg/Kg-dry	242467	5	05/12/2017 19:09	JR
PERCENT MOISTURE D2216								
Percent Moisture	5.88	0		wt%	R342962	1	05/12/2017 07:00	BD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 18, 2018

Trent Godwin
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Northern Avenue October 2018

Dear Trent Godwin: Order No: 1810C88

Analytical Environmental Services, Inc. received 6 samples on 10/12/2018 10:20:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/18-06/30/19.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/18-06/30/19 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Paris Masoudi

Paris Masoudi
Project Manager

3080 Presidential Drive • Atlanta, Georgia 30340 • Tel: 770.457.8177 • Fax: 770.457.8188 • Toll Free: 800.972.4889
www.aesatlanta.com

ANALYTICAL ENVIRONMENTAL SERVICES, INC

AES
3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1810C88

Date: 10/19/18 Page 1 of 1

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd SE Atlanta, GA 30308
PHONE: 678-548-9415	FAX:
SAMPLED BY: Kevin Stephenson, Vernon Fay	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) I	PRESERVATION (See codes) I	REMARKS	No # of Containers
1	MW-15A(R)	10/11/18	1102	X		GW	X	X		4
2	MW-15C(R)	10/11/18	1136	X		GW	X	X		4
3	MW-15D(R)	10/11/18	1010	X		GW	X	X		4
4	DUP-1	10/11/18	—	X		GW	X	X		4
5	FB-10-18	10/11/18	1146	X		W	X	X		4
6	EQBL10118	10/11/18	1158	X		W	X	X		4
7										
8										
9										
10										
11										
12										
13										
14										

ANALYSIS REQUESTED: VOC 8260B; PCB 8082A

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1: Kevin Stephenson	10/11/18 1435	1: FedEx	10/11/18 1435
2:		2: Ayana Blackwell	10/12/18 10:20
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:
Report to:
Christina Coleman
Stephen Wilson
Trent Cochran

SHIPMENT METHOD:
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: Northern Area October 2018
PROJECT #:
SITE ADDRESS: 155 Crossville Road, Port Wentworth
SEND REPORT TO: See Comments
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers

Turnaround Time Request
- [X] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other _____

STATE PROGRAM (if any): _____
E-mail? Fax?
DATA PACKAGE: I ○ II ○ III ○ IV ○

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 18-Oct-18

Client: Georgia Power Company
Project: Northern Avenue October 2018
Lab ID: 1810C88

Case Narrative

PCB Analysis by Method 8082A:

Due to sample matrix, samples 1810C88-003B, -004B required dilution during analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-15A (R)
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 11:02:00 AM
Lab ID:	1810C88-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,1-Dichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,1-Dichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,2-Dibromoethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,2-Dichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,2-Dichloropropane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
2-Butanone	BRL	50		ug/L	268806	1	10/16/2018 14:17	JE
2-Hexanone	BRL	10		ug/L	268806	1	10/16/2018 14:17	JE
4-Methyl-2-pentanone	BRL	10		ug/L	268806	1	10/16/2018 14:17	JE
Acetone	BRL	50		ug/L	268806	1	10/16/2018 14:17	JE
Benzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Bromodichloromethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Bromoform	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Bromomethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Carbon disulfide	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Carbon tetrachloride	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Chlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Chloroethane	BRL	10		ug/L	268806	1	10/16/2018 14:17	JE
Chloroform	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Chloromethane	BRL	10		ug/L	268806	1	10/16/2018 14:17	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Cyclohexane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Dibromochloromethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Dichlorodifluoromethane	BRL	10		ug/L	268806	1	10/16/2018 14:17	JE
Ethylbenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Freon-113	BRL	10		ug/L	268806	1	10/16/2018 14:17	JE
Isopropylbenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
m,p-Xylene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Methyl acetate	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Methylcyclohexane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Methylene chloride	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
o-Xylene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-15A (R)
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 11:02:00 AM
Lab ID:	1810C88-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Tetrachloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Toluene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Trichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Trichlorofluoromethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:17	JE
Vinyl chloride	BRL	2.0		ug/L	268806	1	10/16/2018 14:17	JE
Surr: 4-Bromofluorobenzene	103	68-127		%REC	268806	1	10/16/2018 14:17	JE
Surr: Dibromofluoromethane	108	84.4-122		%REC	268806	1	10/16/2018 14:17	JE
Surr: Toluene-d8	101	80.1-116		%REC	268806	1	10/16/2018 14:17	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	0.50		ug/L	268780	1	10/16/2018 14:39	UH
Aroclor 1221	BRL	0.50		ug/L	268780	1	10/16/2018 14:39	UH
Aroclor 1232	BRL	0.50		ug/L	268780	1	10/16/2018 14:39	UH
Aroclor 1242	BRL	0.50		ug/L	268780	1	10/16/2018 14:39	UH
Aroclor 1248	BRL	0.50		ug/L	268780	1	10/16/2018 14:39	UH
Aroclor 1254	BRL	0.50		ug/L	268780	1	10/16/2018 14:39	UH
Aroclor 1260	BRL	0.50		ug/L	268780	1	10/16/2018 14:39	UH
Surr: Decachlorobiphenyl	86.6	20.9-120		%REC	268780	1	10/16/2018 14:39	UH
Surr: Tetrachloro-m-xylene	81.1	46.7-130		%REC	268780	1	10/16/2018 14:39	UH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-15C (R)
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 11:36:00 AM
Lab ID:	1810C88-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,1-Dichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,1-Dichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,2-Dibromoethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,2-Dichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,2-Dichloropropane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
2-Butanone	BRL	50		ug/L	268806	1	10/16/2018 14:42	JE
2-Hexanone	BRL	10		ug/L	268806	1	10/16/2018 14:42	JE
4-Methyl-2-pentanone	BRL	10		ug/L	268806	1	10/16/2018 14:42	JE
Acetone	BRL	50		ug/L	268806	1	10/16/2018 14:42	JE
Benzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Bromodichloromethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Bromoform	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Bromomethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Carbon disulfide	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Carbon tetrachloride	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Chlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Chloroethane	BRL	10		ug/L	268806	1	10/16/2018 14:42	JE
Chloroform	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Chloromethane	BRL	10		ug/L	268806	1	10/16/2018 14:42	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Cyclohexane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Dibromochloromethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Dichlorodifluoromethane	BRL	10		ug/L	268806	1	10/16/2018 14:42	JE
Ethylbenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Freon-113	BRL	10		ug/L	268806	1	10/16/2018 14:42	JE
Isopropylbenzene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
m,p-Xylene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Methyl acetate	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Methylcyclohexane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Methylene chloride	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
o-Xylene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-15C (R)
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 11:36:00 AM
Lab ID:	1810C88-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Tetrachloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Toluene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Trichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Trichlorofluoromethane	BRL	5.0		ug/L	268806	1	10/16/2018 14:42	JE
Vinyl chloride	BRL	2.0		ug/L	268806	1	10/16/2018 14:42	JE
Surr: 4-Bromofluorobenzene	104	68-127		%REC	268806	1	10/16/2018 14:42	JE
Surr: Dibromofluoromethane	121	84.4-122		%REC	268806	1	10/16/2018 14:42	JE
Surr: Toluene-d8	95.9	80.1-116		%REC	268806	1	10/16/2018 14:42	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	0.50		ug/L	268780	1	10/16/2018 17:17	UH
Aroclor 1221	BRL	0.50		ug/L	268780	1	10/16/2018 17:17	UH
Aroclor 1232	BRL	0.50		ug/L	268780	1	10/16/2018 17:17	UH
Aroclor 1242	BRL	0.50		ug/L	268780	1	10/16/2018 17:17	UH
Aroclor 1248	BRL	0.50		ug/L	268780	1	10/16/2018 17:17	UH
Aroclor 1254	BRL	0.50		ug/L	268780	1	10/16/2018 17:17	UH
Aroclor 1260	BRL	0.50		ug/L	268780	1	10/16/2018 17:17	UH
Surr: Decachlorobiphenyl	91.6	20.9-120		%REC	268780	1	10/16/2018 17:17	UH
Surr: Tetrachloro-m-xylene	80.5	46.7-130		%REC	268780	1	10/16/2018 17:17	UH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-15D (R)
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 10:10:00 AM
Lab ID:	1810C88-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,1-Dichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,1-Dichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,2-Dibromoethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,2-Dichloroethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,2-Dichloropropane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
2-Butanone	BRL	50		ug/L	268806	1	10/16/2018 15:06	JE
2-Hexanone	BRL	10		ug/L	268806	1	10/16/2018 15:06	JE
4-Methyl-2-pentanone	BRL	10		ug/L	268806	1	10/16/2018 15:06	JE
Acetone	BRL	50		ug/L	268806	1	10/16/2018 15:06	JE
Benzene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Bromodichloromethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Bromoform	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Bromomethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Carbon disulfide	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Carbon tetrachloride	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Chlorobenzene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Chloroethane	BRL	10		ug/L	268806	1	10/16/2018 15:06	JE
Chloroform	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Chloromethane	BRL	10		ug/L	268806	1	10/16/2018 15:06	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Cyclohexane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Dibromochloromethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Dichlorodifluoromethane	BRL	10		ug/L	268806	1	10/16/2018 15:06	JE
Ethylbenzene	9.0	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Freon-113	BRL	10		ug/L	268806	1	10/16/2018 15:06	JE
Isopropylbenzene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
m,p-Xylene	18	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Methyl acetate	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Methylcyclohexane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Methylene chloride	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
o-Xylene	8.2	5.0		ug/L	268806	1	10/16/2018 15:06	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-15D (R)
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 10:10:00 AM
Lab ID:	1810C88-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Tetrachloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Toluene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Trichloroethene	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Trichlorofluoromethane	BRL	5.0		ug/L	268806	1	10/16/2018 15:06	JE
Vinyl chloride	BRL	2.0		ug/L	268806	1	10/16/2018 15:06	JE
Surr: 4-Bromofluorobenzene	108	68-127		%REC	268806	1	10/16/2018 15:06	JE
Surr: Dibromofluoromethane	122	84.4-122	S	%REC	268806	1	10/16/2018 15:06	JE
Surr: Toluene-d8	96.2	80.1-116		%REC	268806	1	10/16/2018 15:06	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	1.0		ug/L	268780	2	10/16/2018 18:58	UH
Aroclor 1221	BRL	1.0		ug/L	268780	2	10/16/2018 18:58	UH
Aroclor 1232	BRL	1.0		ug/L	268780	2	10/16/2018 18:58	UH
Aroclor 1242	BRL	1.0		ug/L	268780	2	10/16/2018 18:58	UH
Aroclor 1248	BRL	1.0		ug/L	268780	2	10/16/2018 18:58	UH
Aroclor 1254	BRL	0.50		ug/L	268780	1	10/16/2018 17:28	UH
Aroclor 1260	BRL	0.50		ug/L	268780	1	10/16/2018 17:28	UH
Surr: Decachlorobiphenyl	86.7	20.9-120		%REC	268780	1	10/16/2018 17:28	UH
Surr: Tetrachloro-m-xylene	84.9	46.7-130		%REC	268780	1	10/16/2018 17:28	UH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	DUP-1
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018
Lab ID:	1810C88-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,1-Dichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,1-Dichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,2-Dibromoethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,2-Dichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,2-Dichloropropane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
2-Butanone	BRL	50		ug/L	268806	1	10/15/2018 22:56	JE
2-Hexanone	BRL	10		ug/L	268806	1	10/15/2018 22:56	JE
4-Methyl-2-pentanone	BRL	10		ug/L	268806	1	10/15/2018 22:56	JE
Acetone	BRL	50		ug/L	268806	1	10/15/2018 22:56	JE
Benzene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Bromodichloromethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Bromoform	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Bromomethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Carbon disulfide	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Carbon tetrachloride	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Chlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Chloroethane	BRL	10		ug/L	268806	1	10/15/2018 22:56	JE
Chloroform	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Chloromethane	BRL	10		ug/L	268806	1	10/15/2018 22:56	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Cyclohexane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Dibromochloromethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Dichlorodifluoromethane	BRL	10		ug/L	268806	1	10/15/2018 22:56	JE
Ethylbenzene	7.8	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Freon-113	BRL	10		ug/L	268806	1	10/15/2018 22:56	JE
Isopropylbenzene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
m,p-Xylene	16	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Methyl acetate	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Methylcyclohexane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Methylene chloride	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
o-Xylene	7.4	5.0		ug/L	268806	1	10/15/2018 22:56	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	DUP-1
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018
Lab ID:	1810C88-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Tetrachloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Toluene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Trichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Trichlorofluoromethane	BRL	5.0		ug/L	268806	1	10/15/2018 22:56	JE
Vinyl chloride	BRL	2.0		ug/L	268806	1	10/15/2018 22:56	JE
Surr: 4-Bromofluorobenzene	108	68-127		%REC	268806	1	10/15/2018 22:56	JE
Surr: Dibromofluoromethane	119	84.4-122		%REC	268806	1	10/15/2018 22:56	JE
Surr: Toluene-d8	95.2	80.1-116		%REC	268806	1	10/15/2018 22:56	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	0.50		ug/L	268780	1	10/17/2018 22:05	UH
Aroclor 1221	BRL	0.50		ug/L	268780	1	10/17/2018 22:05	UH
Aroclor 1232	BRL	0.50		ug/L	268780	1	10/17/2018 22:05	UH
Aroclor 1242	BRL	0.50		ug/L	268780	1	10/17/2018 22:05	UH
Aroclor 1248	BRL	0.50		ug/L	268780	1	10/17/2018 22:05	UH
Aroclor 1254	BRL	0.50		ug/L	268780	1	10/16/2018 17:39	UH
Aroclor 1260	BRL	0.50		ug/L	268780	1	10/16/2018 17:39	UH
Surr: Decachlorobiphenyl	96.4	20.9-120		%REC	268780	1	10/16/2018 17:39	UH
Surr: Tetrachloro-m-xylene	91.3	46.7-130		%REC	268780	1	10/16/2018 17:39	UH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	FBL101118
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 11:46:00 AM
Lab ID:	1810C88-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,1-Dichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,1-Dichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,2-Dibromoethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,2-Dichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,2-Dichloropropane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
2-Butanone	BRL	50		ug/L	268806	1	10/15/2018 17:39	JE
2-Hexanone	BRL	10		ug/L	268806	1	10/15/2018 17:39	JE
4-Methyl-2-pentanone	BRL	10		ug/L	268806	1	10/15/2018 17:39	JE
Acetone	BRL	50		ug/L	268806	1	10/15/2018 17:39	JE
Benzene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Bromodichloromethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Bromoform	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Bromomethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Carbon disulfide	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Carbon tetrachloride	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Chlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Chloroethane	BRL	10		ug/L	268806	1	10/15/2018 17:39	JE
Chloroform	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Chloromethane	BRL	10		ug/L	268806	1	10/15/2018 17:39	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Cyclohexane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Dibromochloromethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Dichlorodifluoromethane	BRL	10		ug/L	268806	1	10/15/2018 17:39	JE
Ethylbenzene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Freon-113	BRL	10		ug/L	268806	1	10/15/2018 17:39	JE
Isopropylbenzene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
m,p-Xylene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Methyl acetate	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Methylcyclohexane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Methylene chloride	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
o-Xylene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	FBL101118
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 11:46:00 AM
Lab ID:	1810C88-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Tetrachloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Toluene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Trichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Trichlorofluoromethane	BRL	5.0		ug/L	268806	1	10/15/2018 17:39	JE
Vinyl chloride	BRL	2.0		ug/L	268806	1	10/15/2018 17:39	JE
Surr: 4-Bromofluorobenzene	103	68-127		%REC	268806	1	10/15/2018 17:39	JE
Surr: Dibromofluoromethane	117	84.4-122		%REC	268806	1	10/15/2018 17:39	JE
Surr: Toluene-d8	93.8	80.1-116		%REC	268806	1	10/15/2018 17:39	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	0.50		ug/L	268780	1	10/16/2018 17:51	UH
Aroclor 1221	BRL	0.50		ug/L	268780	1	10/16/2018 17:51	UH
Aroclor 1232	BRL	0.50		ug/L	268780	1	10/16/2018 17:51	UH
Aroclor 1242	BRL	0.50		ug/L	268780	1	10/16/2018 17:51	UH
Aroclor 1248	BRL	0.50		ug/L	268780	1	10/16/2018 17:51	UH
Aroclor 1254	BRL	0.50		ug/L	268780	1	10/16/2018 17:51	UH
Aroclor 1260	BRL	0.50		ug/L	268780	1	10/16/2018 17:51	UH
Surr: Decachlorobiphenyl	108	20.9-120		%REC	268780	1	10/16/2018 17:51	UH
Surr: Tetrachloro-m-xylene	75.5	46.7-130		%REC	268780	1	10/16/2018 17:51	UH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	EQBL101118
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 11:58:00 AM
Lab ID:	1810C88-006	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,1-Dichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,1-Dichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,2-Dibromoethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,2-Dichloroethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,2-Dichloropropane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
2-Butanone	BRL	50		ug/L	268806	1	10/15/2018 18:28	JE
2-Hexanone	BRL	10		ug/L	268806	1	10/15/2018 18:28	JE
4-Methyl-2-pentanone	BRL	10		ug/L	268806	1	10/15/2018 18:28	JE
Acetone	BRL	50		ug/L	268806	1	10/15/2018 18:28	JE
Benzene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Bromodichloromethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Bromoform	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Bromomethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Carbon disulfide	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Carbon tetrachloride	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Chlorobenzene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Chloroethane	BRL	10		ug/L	268806	1	10/15/2018 18:28	JE
Chloroform	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Chloromethane	BRL	10		ug/L	268806	1	10/15/2018 18:28	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Cyclohexane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Dibromochloromethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Dichlorodifluoromethane	BRL	10		ug/L	268806	1	10/15/2018 18:28	JE
Ethylbenzene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Freon-113	BRL	10		ug/L	268806	1	10/15/2018 18:28	JE
Isopropylbenzene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
m,p-Xylene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Methyl acetate	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Methylcyclohexane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Methylene chloride	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
o-Xylene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Oct-18

Client:	Georgia Power Company	**Client Sample ID:**	EQBL101118
Project Name:	Northern Avenue October 2018	**Collection Date:**	10/11/2018 11:58:00 AM
Lab ID:	1810C88-006	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Tetrachloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Toluene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Trichloroethene	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Trichlorofluoromethane	BRL	5.0		ug/L	268806	1	10/15/2018 18:28	JE
Vinyl chloride	BRL	2.0		ug/L	268806	1	10/15/2018 18:28	JE
Surr: 4-Bromofluorobenzene	103	68-127		%REC	268806	1	10/15/2018 18:28	JE
Surr: Dibromofluoromethane	122	84.4-122		%REC	268806	1	10/15/2018 18:28	JE
Surr: Toluene-d8	96.3	80.1-116		%REC	268806	1	10/15/2018 18:28	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	0.50		ug/L	268780	1	10/16/2018 18:25	UH
Aroclor 1221	BRL	0.50		ug/L	268780	1	10/16/2018 18:25	UH
Aroclor 1232	BRL	0.50		ug/L	268780	1	10/16/2018 18:25	UH
Aroclor 1242	BRL	0.50		ug/L	268780	1	10/16/2018 18:25	UH
Aroclor 1248	BRL	0.50		ug/L	268780	1	10/16/2018 18:25	UH
Aroclor 1254	BRL	0.50		ug/L	268780	1	10/16/2018 18:25	UH
Aroclor 1260	BRL	0.50		ug/L	268780	1	10/16/2018 18:25	UH
Surr: Decachlorobiphenyl	60.2	20.9-120		%REC	268780	1	10/16/2018 18:25	UH
Surr: Tetrachloro-m-xylene	70.7	46.7-130		%REC	268780	1	10/16/2018 18:25	UH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **GEORGIA POWER CO** AES Work Order Number: **1810C88**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	●	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	●	○		
5.	Custody seals intact on shipping container?	○	○	●		
6.	Temperature blanks present?	○	●	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	●	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	●	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	●	○	○		
10.	Sampler name and/or signature on COC?	●	○	○		
11.	Were all samples received within holding time?	●	○	○		
12.	TAT marked on the COC?	●	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.6 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). AB 10/12/18

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	●	○	○		
17.	Custody seals present on sample containers?	○	●	○		
18.	Custody seals intact on sample containers?	○	○	●		
19.	Do sample container labels match the COC?	●	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	●	○	○		
21.	Were all of the samples listed on the COC received?	●	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	●	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	●	○	○		
24.	Were samples received in appropriate containers?	●	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	●	○	○		
26.	Were trip blanks submitted?	○	●	○	listed on COC ☐ not listed on COC ■	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). AB 10/12/18

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	●		
29.	Containers meet preservation guidelines?	○	○	●		
30.	Was pH adjusted at Sample Receipt?	○	○	●		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). AB 10/12/18

Locked

Client: Georgia Power Company
Project Name: Northern Avenue October 2018
Workorder: 1810C88

ANALYTICAL QC SUMMARY REPORT

BatchID: 268780

Sample ID: **MB-268780** Client ID: Units: **ug/L** Prep Date: **10/16/2018** Run No: **382392**
SampleType: **MBLK** TestCode: **POLYCHLORINATED BIPHENYLS SW8082A** BatchID: **268780** Analysis Date: **10/16/2018** Seq No: **8530658**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aroclor 1016	BRL	0.50									
Aroclor 1221	BRL	0.50									
Aroclor 1232	BRL	0.50									
Aroclor 1242	BRL	0.50									
Aroclor 1248	BRL	0.50									
Aroclor 1254	BRL	0.50									
Aroclor 1260	BRL	0.50									
Surr: Decachlorobiphenyl	0.4588	0	0.5000		91.8	20.9	120				
Surr: Tetrachloro-m-xylene	0.4130	0	0.5000		82.6	46.7	130				

Sample ID: **LCS-268780** Client ID: Units: **ug/L** Prep Date: **10/16/2018** Run No: **382392**
SampleType: **LCS** TestCode: **POLYCHLORINATED BIPHENYLS SW8082A** BatchID: **268780** Analysis Date: **10/16/2018** Seq No: **8530659**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aroclor 1016	5.116	0.50	5.000		102	67.9	120				
Aroclor 1260	5.331	0.50	5.000		107	63.5	121				
Surr: Decachlorobiphenyl	0.4833	0	0.5000		96.7	20.9	120				
Surr: Tetrachloro-m-xylene	0.4181	0	0.5000		83.6	46.7	130				

Sample ID: **1810C88-005BMS** Client ID: **FBL101118** Units: **ug/L** Prep Date: **10/16/2018** Run No: **382392**
SampleType: **MS** TestCode: **POLYCHLORINATED BIPHENYLS SW8082A** BatchID: **268780** Analysis Date: **10/16/2018** Seq No: **8530665**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aroclor 1016	5.179	0.50	5.000		104	62	130				
Aroclor 1260	5.716	0.50	5.000		114	51.5	126				
Surr: Decachlorobiphenyl	0.4851	0	0.5000		97.0	20.9	120				
Surr: Tetrachloro-m-xylene	0.4291	0	0.5000		85.8	46.7	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Northern Avenue October 2018
Workorder: 1810C88

ANALYTICAL QC SUMMARY REPORT

BatchID: 268780

Sample ID: **1810C88-005BMSD** Client ID: **FBL101118** Units: **ug/L** Prep Date: **10/16/2018** Run No: **382392**
SampleType: **MSD** TestCode: **POLYCHLORINATED BIPHENYLS SW8082A** BatchID: **268780** Analysis Date: **10/16/2018** Seq No: **8530694**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aroclor 1016	4.757	0.50	5.000		95.1	62	130	5.179	8.50	20.5	
Aroclor 1260	5.139	0.50	5.000		103	51.5	126	5.716	10.6	25	
Surr: Decachlorobiphenyl	0.4919	0	0.5000		98.4	20.9	120	0.4851	0	0	
Surr: Tetrachloro-m-xylene	0.3755	0	0.5000		75.1	46.7	130	0.4291	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Northern Avenue October 2018
Workorder: 1810C88

ANALYTICAL QC SUMMARY REPORT

BatchID: 268806

Sample ID: **MB-268806** Client ID: Units: **ug/L** Prep Date: **10/15/2018** Run No: **382289**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **268806** Analysis Date: **10/15/2018** Seq No: **8528416**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Northern Avenue October 2018
Workorder: 1810C88

ANALYTICAL QC SUMMARY REPORT

BatchID: 268806

Sample ID: **MB-268806** Client ID: Units: **ug/L** Prep Date: **10/15/2018** Run No: **382289**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **268806** Analysis Date: **10/15/2018** Seq No: **8528416**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	49.77	0	50.00		99.5	68	127				
Surr: Dibromofluoromethane	54.05	0	50.00		108	84.4	122				
Surr: Toluene-d8	47.06	0	50.00		94.1	80.1	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Northern Avenue October 2018
Workorder: 1810C88

ANALYTICAL QC SUMMARY REPORT

BatchID: 268806

Sample ID: **LCS-268806** Client ID: Units: **ug/L** Prep Date: **10/15/2018** Run No: **382289**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **268806** Analysis Date: **10/15/2018** Seq No: **8528415**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	55.53	5.0	50.00		111	69	136				
Benzene	53.41	5.0	50.00		107	73.7	126				
Chlorobenzene	58.35	5.0	50.00		117	73.5	124				
Toluene	54.31	5.0	50.00		109	76.8	125				
Trichloroethene	59.41	5.0	50.00		119	70.9	124				
Surr: 4-Bromofluorobenzene	50.82	0	50.00		102	68	127				
Surr: Dibromofluoromethane	50.57	0	50.00		101	84.4	122				
Surr: Toluene-d8	48.98	0	50.00		98.0	80.1	116				

Sample ID: **1810D37-006AMS** Client ID: Units: **ug/L** Prep Date: **10/15/2018** Run No: **382289**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **268806** Analysis Date: **10/15/2018** Seq No: **8528432**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	60.44	5.0	50.00		121	65.7	143				
Benzene	54.02	5.0	50.00		108	66.1	137				
Chlorobenzene	58.99	5.0	50.00		118	70.9	132				
Toluene	52.07	5.0	50.00		104	63.8	141				
Trichloroethene	63.13	5.0	50.00		126	70.6	128				
Surr: 4-Bromofluorobenzene	51.04	0	50.00		102	68	127				
Surr: Dibromofluoromethane	60.81	0	50.00		122	84.4	122				
Surr: Toluene-d8	47.40	0	50.00		94.8	80.1	116				

Sample ID: **1810D37-006AMSD** Client ID: Units: **ug/L** Prep Date: **10/15/2018** Run No: **382289**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **268806** Analysis Date: **10/15/2018** Seq No: **8528433**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	57.20	5.0	50.00		114	65.7	143	60.44	5.51	17.7	
Benzene	53.83	5.0	50.00		108	66.1	137	54.02	0.352	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Northern Avenue October 2018
Workorder: 1810C88

ANALYTICAL QC SUMMARY REPORT

BatchID: 268806

Sample ID: **1810D37-006AMSD** Client ID: Units: **ug/L** Prep Date: **10/15/2018** Run No: **382289**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **268806** Analysis Date: **10/15/2018** Seq No: **8528433**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	58.01	5.0	50.00		116	70.9	132	58.99	1.68	20	
Toluene	52.07	5.0	50.00		104	63.8	141	52.07	0	20	
Trichloroethene	62.60	5.0	50.00		125	70.6	128	63.13	0.843	20	
Surr: 4-Bromofluorobenzene	50.32	0	50.00		101	68	127	51.04	0	0	
Surr: Dibromofluoromethane	61.44	0	50.00		123	84.4	122	60.81	0	0	S
Surr: Toluene-d8	47.41	0	50.00		94.8	80.1	116	47.40	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

November 15, 2018

Trent Godwin
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft

Dear Trent Godwin: Order No: 1811186

Analytical Environmental Services, Inc. received 8 samples on 11/2/2018 12:40:00 PM
for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/18-06/30/19.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/18-06/30/19 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Paris Masoudi

Paris Masoudi
Project Manager

Revision 11/15/2018

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ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1811180

Date: 11/1/18 Page 1 of 1

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd SE Atlanta, GA 30308
PHONE: 706-266-0551	EMAIL: Robert.Mull@ResolukEnv.com
SAMPLED BY: Robert Mull/Trent Godwin	SIGNATURE: Robert Mull

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: As, Ba (6020)	ANALYSIS REQUESTED: As, Tl, Sb, Ni (6020)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	SBCS-03	10/30/18	0855	X		SO		X			1
2	SBCS-03A	10/30/18	0900	X		SO		X		HOLD	1
3	SBCS-04	10/30/18	0911	X		SO		X			1
4	SBCS-04A	10/30/18	0916	X		SO		X		HOLD	1
5	RVCS-155W	10/30/18	1013	X		SO	X				1
6	RVCS-155WA	10/30/18	1027	X		SO	X			HOLD	1
7	SRCS-02A-W1	10/30/18	1042	X		SO	X				1
8	SRCS-02A-W2	10/30/18	1051	X		SO	X			HOLD	1
9	SRCS-02A-N1	10/30/18	1056	X		SO	X				1
10	SRCS-02A-N2	10/30/18	1100	X		SO	X			HOLD	1
11	SRCS-02A-E	10/30/18	1123	X		SO	X				1
12	SRCS-02A-E1	10/30/18	1127	X		SO	X			HOLD	1
13	DCS-67A	10/30/18	1315	X		SO	X				1
14	DCS-67A1	10/30/18	1320	X		SO	X			HOLD	1

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Robert Mull	11/2/18 1240	1. M. YUANG	11/2/18 12:40
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
(client) FedEx UPS US mail courier
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Port Wentworth, GA 31407
SEND REPORT TO: Steven.Wilson@ResolukEnv.com Trent.Godwin@ResolukEnv.com, CColeman@SouthernCo.com
INVOICE TO (IF DIFFERENT FROM ABOVE):
QUOTE #: PO#:

RECEIPT
Total # of Containers: 14

Turnaround Time (TAT) Request
- [x] Standard
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same-Day Rush (auth req.)
- [ ] Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Client assumes sole responsibility for damage or loss of samples before we accept them. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arrangements are made.

7.11.18_CO

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water ST=Stormwater WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 15-Nov-18

Client: Georgia Power Company
Project: Plant Kraft
Lab ID: 1811186

Case Narrative

Additional Analysis:

At the request of Stephen Wilson via email on 11/13/18, sample "DCS-67A1" was taken off hold and analyzed for Arsenic by 6020 at a rush TAT - due by 11/15/18 at earliest availability.

Analytical Environmental Services, Inc **Date:** 15-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	SBCS-03
Project Name:	Plant Kraft	**Collection Date:**	10/30/2018 8:55:00 AM
Lab ID:	1811186-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Antimony	BRL	4.26		mg/Kg-dry	269785	20	11/07/2018 03:44	KP
Arsenic	BRL	19.9		mg/Kg-dry	269785	20	11/07/2018 03:44	KP
Nickel	6.23	4.26		mg/Kg-dry	269785	20	11/07/2018 03:44	KP
Thallium	BRL	0.85		mg/Kg-dry	269785	20	11/07/2018 03:44	KP
PERCENT MOISTURE D2216								
Percent Moisture	8.39	0		wt%	R384141	1	11/07/2018 14:30	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	SBCS-04
Project Name:	Plant Kraft	**Collection Date:**	10/30/2018 9:11:00 AM
Lab ID:	1811186-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Antimony	BRL	4.09		mg/Kg-dry	269785	20	11/07/2018 04:00	KP
Arsenic	BRL	19.9		mg/Kg-dry	269785	20	11/07/2018 04:00	KP
Nickel	7.50	4.09		mg/Kg-dry	269785	20	11/07/2018 04:00	KP
Thallium	BRL	0.82		mg/Kg-dry	269785	20	11/07/2018 04:00	KP
PERCENT MOISTURE D2216								
Percent Moisture	4.19	0		wt%	R384141	1	11/07/2018 14:30	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	RVCS-155W
Project Name:	Plant Kraft	**Collection Date:**	10/30/2018 10:13:00 AM
Lab ID:	1811186-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	20.0		mg/Kg-dry	269785	20	11/07/2018 04:03	KP
Barium	149	9.10		mg/Kg-dry	269785	20	11/08/2018 21:00	KP
PERCENT MOISTURE D2216								
Percent Moisture	13.7	0		wt%	R384141	1	11/07/2018 14:30	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-02A-W1
Project Name:	Plant Kraft	**Collection Date:**	10/30/2018 10:42:00 AM
Lab ID:	1811186-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	20.0		mg/Kg-dry	269785	20	11/07/2018 04:06	KP
Barium	16.3	8.35		mg/Kg-dry	269785	20	11/08/2018 21:03	KP
PERCENT MOISTURE D2216								
Percent Moisture	5.60	0		wt%	R384141	1	11/07/2018 14:30	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-02A-N1
Project Name:	Plant Kraft	**Collection Date:**	10/30/2018 10:56:00 AM
Lab ID:	1811186-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	19.9		mg/Kg-dry	269785	20	11/07/2018 04:19	KP
Barium	17.9	7.95		mg/Kg-dry	269785	20	11/08/2018 14:13	KP
PERCENT MOISTURE D2216								
Percent Moisture	6.87	0		wt%	R384141	1	11/07/2018 14:30	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	SRCS-02A-E
Project Name:	Plant Kraft	**Collection Date:**	10/30/2018 11:23:00 AM
Lab ID:	1811186-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	20.0		mg/Kg-dry	269785	20	11/07/2018 04:22	KP
Barium	18.1	8.45		mg/Kg-dry	269785	20	11/08/2018 21:06	KP
PERCENT MOISTURE D2216								
Percent Moisture	5.12	0		wt%	R384141	1	11/07/2018 14:30	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	DCS-67A
Project Name:	Plant Kraft	**Collection Date:**	10/30/2018 1:15:00 PM
Lab ID:	1811186-013	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	69.4	23.4		mg/Kg-dry	269785	20	11/07/2018 04:26	KP
Barium	499	9.36		mg/Kg-dry	269785	20	11/08/2018 14:16	KP
PERCENT MOISTURE D2216								
Percent Moisture	4.46	0		wt%	R384141	1	11/07/2018 14:30	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 15-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	DCS67A1
Project Name:	Plant Kraft	**Collection Date:**	10/30/2018 1:20:00 PM
Lab ID:	1811186-014	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Metals by ICP/MS SW6020B				**(SW3050B)**				
Arsenic	BRL	18.7		mg/Kg-dry	270196	20	11/14/2018 16:10	JW
PERCENT MOISTURE D2216								
Percent Moisture	6.04	0		wt%	R384652	1	11/14/2018 14:00	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Clear Save as

AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1811186**

2. Carrier: FedEx ☐ UPS ☐ USPS ☐ Client ■ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	●	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	●	○		
5.	Custody seals intact on shipping container?	○	○	●		
6.	Temperature blanks present?	○	●	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	●	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	●	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	●	○	○		
10.	Sampler name and/or signature on COC?	●	○	○		
11.	Were all samples received within holding time?	●	○	○		
12.	TAT marked on the COC?	●	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 2.2 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 11/2/18

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	●	○	○		
17.	Custody seals present on sample containers?	○	●	○		
18.	Custody seals intact on sample containers?	○	○	●		
19.	Do sample container labels match the COC?	●	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	●	○	○		
21.	Were all of the samples listed on the COC received?	●	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	●	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	●	○	○		
24.	Were samples received in appropriate containers?	●	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	●		
26.	Were trip blanks submitted?	○	○	●	listed on COC ☐ not listed on COC ☐	

27. Comments: _____

This section only applies to samples where pH can be checked at Sample Receipt.

I certify that I have completed sections 16-27 (dated initials). MJ 11/2/18

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	●		
29.	Containers meet preservation guidelines?	○	○	●		
30.	Was pH adjusted at Sample Receipt?	○	○	●		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). MJ 11/2/18

Locked

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811186

ANALYTICAL QC SUMMARY REPORT

BatchID: 269785

Sample ID: **MB-269785** Client ID: Units: **ug/Kg** Prep Date: **11/06/2018** Run No: **384111**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **269785** Analysis Date: **11/07/2018** Seq No: **8576359**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	1250									
Arsenic	BRL	6250									
Barium	BRL	2500									
Nickel	BRL	1250									
Thallium	BRL	250									

Sample ID: **LCS-269785** Client ID: Units: **ug/Kg** Prep Date: **11/06/2018** Run No: **384111**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **269785** Analysis Date: **11/07/2018** Seq No: **8576360**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	9243	1250	10000		92.4	80	120				
Arsenic	10170	5000	10000		102	80	120				
Barium	9335	2500	10000		93.4	80	120				
Nickel	9920	1250	10000		99.2	80	120				
Thallium	9035	250	10000		90.3	80	120				

Sample ID: **1811186-001AMS** Client ID: **SBCS-03** Units: **mg/Kg-dry** Prep Date: **11/06/2018** Run No: **384111**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **269785** Analysis Date: **11/07/2018** Seq No: **8576362**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	5.642	4.26	8.515		66.3	75	125				S
Arsenic	BRL	21.3	8.515		117	75	125				
Barium	12.93	8.52	8.515	6.554	74.9	75	125				S
Nickel	12.80	4.26	8.515	6.233	77.1	75	125				
Thallium	8.155	0.85	8.515		95.8	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811186

ANALYTICAL QC SUMMARY REPORT

BatchID: 269785

Sample ID: **1811186-001AMSD** Client ID: **SBCS-03** Units: **mg/Kg-dry** Prep Date: **11/06/2018** Run No: **384111**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **269785** Analysis Date: **11/07/2018** Seq No: **8576363**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	5.564	4.24	8.484		65.6	75	125	5.642	1.39	20	S
Arsenic	BRL	21.2	8.484		106	75	125	9.962	0	20	
Barium	12.26	8.48	8.484	6.554	67.3	75	125	12.93	5.28	20	S
Nickel	12.95	4.24	8.484	6.233	79.2	75	125	12.80	1.16	20	
Thallium	7.789	0.85	8.484		91.8	75	125	8.155	4.60	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811186

ANALYTICAL QC SUMMARY REPORT

BatchID: 270196

Sample ID: **MB-270196** Client ID: Units: **ug/Kg** Prep Date: **11/14/2018** Run No: **384696**
SampleType: **MBLK** TestCode: **Metals by ICP/MS SW6020B** BatchID: **270196** Analysis Date: **11/14/2018** Seq No: **8590045**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	20000									

Sample ID: **LCS-270196** Client ID: Units: **ug/Kg** Prep Date: **11/14/2018** Run No: **384696**
SampleType: **LCS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **270196** Analysis Date: **11/14/2018** Seq No: **8590046**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	10740	6080	10000		107	80	120				

Sample ID: **1811186-014AMS** Client ID: **DCS67A1** Units: **mg/Kg-dry** Prep Date: **11/14/2018** Run No: **384696**
SampleType: **MS** TestCode: **Metals by ICP/MS SW6020B** BatchID: **270196** Analysis Date: **11/14/2018** Seq No: **8590048**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	8.970	8.94	7.447		120	75	125				

Sample ID: **1811186-014AMSD** Client ID: **DCS67A1** Units: **mg/Kg-dry** Prep Date: **11/14/2018** Run No: **384696**
SampleType: **MSD** TestCode: **Metals by ICP/MS SW6020B** BatchID: **270196** Analysis Date: **11/14/2018** Seq No: **8590049**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	9.406	8.97	7.471		126	75	125	8.970	4.75	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 13, 2018

Lea Millet
Georgia Power Company

241 Ralph McGill Blvd.
Atlanta GA 30308

RE: Plant Kraft

Dear Lea Millet: Order No: 1811270

Analytical Environmental Services, Inc. received 6 samples on 11/2/2018 12:40:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/18-06/30/19.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/18-06/30/19 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Paris Masoudi

Paris Masoudi
Project Manager

3080 Presidential Drive • Atlanta, Georgia 30340 • Tel: 770.457.8177 • Fax: 770.457.8188 • Toll Free: 800.972.4889
www.aesatlanta.com

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1811270

Date: 11/1/18 Page 1 of 1

COMPANY:	ADDRESS:
Georgia Powe Company	241 Ralph McGill Blvd SE Atlanta, GA 30308
PHONE: 706-266-0551	EMAIL: Robert.Mull@ResolukEnv.com
SAMPLED BY: Robert Mull, Kevin Stephenson, Veronica Fay	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: VOCs 8260	SVOCs 8270	PCBs 8082	Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn 6020	PRESERVATION (see codes): H+I	I	I	N	REMARKS	Number of Containers
1	MW-19	11/1/18	1100	X		GW	X	X	X	X						7
2	MW-18	11/1/18	1148	X		GW	X	X	X	X						7
3	MW-17	11/1/18	1441	X		GW	X	X	X	X						7
4	MW-16	11/1/18	1512	X		GW	X	X	X	X						7
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	11/2/18 1240	1. M. HWANG	11/2/18 12:40
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
(client) FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION

PROJECT NAME: Plant Kraft
PROJECT #:
SITE ADDRESS: 155 Crossgate Rd Port Wentworth, GA 31407
SEND REPORT TO: Stephen.Wilson@ResolukEnv.com
INVOICE TO: ~~Trent.Coulson@ResolukEnv.com~~ KW ~~CColeman@ResolukEnv.com~~ CColeman@SouthernCo.com
(IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 28

Turnaround Time (TAT) Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same-Day Rush **(auth req.)**
- [ ] Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 13-Nov-18

Client: Georgia Power Company
Project: Plant Kraft
Lab ID: 1811270

Case Narrative

Sample Receiving Nonconformance:

Trip blanks were provided but not listed on the Chain of Custody (COC).

LCS surrogate high:

Percent recovery for the surrogate spiking compound 2-Fluorobiphenyl on the LCS for Batch 269745 were outside control limits biased high. All target analytes, other LCS surrogate recoveries and 2-Fluorobiphenyl recoveries in associated samples were within control limits and data was not affected.

Volatile Organic Compounds Analysis by Method 8260B:

RPD value for Ethylbenzene, m,p-Xylene, & o-Xylene on sample 1811593-018ADUP was outside advisory control limits due to suspected non-homogeneous sample matrix. All percent recoveries were within control limits.

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-19
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 11:00:00 AM
Lab ID:	1811270-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Antimony	BRL	5.00		ug/L	269757	1	11/07/2018 03:18	JW
Arsenic	BRL	5.00		ug/L	269757	1	11/07/2018 03:18	JW
Barium	348	10.0		ug/L	269757	1	11/07/2018 03:18	JW
Beryllium	BRL	1.00		ug/L	269757	1	11/07/2018 03:18	JW
Cadmium	BRL	0.700		ug/L	269757	1	11/07/2018 03:18	JW
Chromium	5.83	5.00		ug/L	269757	1	11/07/2018 03:18	JW
Copper	BRL	2.00		ug/L	269757	1	11/07/2018 03:18	JW
Lead	BRL	1.00		ug/L	269757	1	11/07/2018 03:18	JW
Nickel	BRL	5.00		ug/L	269757	1	11/07/2018 03:18	JW
Selenium	BRL	5.00		ug/L	269757	1	11/07/2018 03:18	JW
Silver	BRL	1.00		ug/L	269757	1	11/07/2018 03:18	JW
Thallium	BRL	1.00		ug/L	269757	1	11/07/2018 03:18	JW
Zinc	BRL	10.0		ug/L	269757	1	11/07/2018 03:18	JW
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3510C)**				
1,1´-Biphenyl	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2,4,5-Trichlorophenol	BRL	25		ug/L	269745	1	11/05/2018 19:30	YH
2,4,6-Trichlorophenol	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2,4-Dichlorophenol	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2,4-Dimethylphenol	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2,4-Dinitrophenol	BRL	25		ug/L	269745	1	11/05/2018 19:30	YH
2,4-Dinitrotoluene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2,6-Dinitrotoluene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2-Chloronaphthalene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2-Chlorophenol	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2-Methylnaphthalene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2-Methylphenol	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
2-Nitroaniline	BRL	25		ug/L	269745	1	11/05/2018 19:30	YH
2-Nitrophenol	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
3,3´-Dichlorobenzidine	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
3-Nitroaniline	BRL	25		ug/L	269745	1	11/05/2018 19:30	YH
4,6-Dinitro-2-methylphenol	BRL	25		ug/L	269745	1	11/05/2018 19:30	YH
4-Bromophenyl phenyl ether	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
4-Chloro-3-methylphenol	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
4-Chloroaniline	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
4-Chlorophenyl phenyl ether	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
4-Methylphenol	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
4-Nitroaniline	BRL	25		ug/L	269745	1	11/05/2018 19:30	YH
4-Nitrophenol	BRL	25		ug/L	269745	1	11/05/2018 19:30	YH
Acenaphthene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Acenaphthylene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-19
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 11:00:00 AM
Lab ID:	1811270-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3510C)**				
Acetophenone	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Anthracene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Atrazine	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Benz(a)anthracene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Benzaldehyde	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Benzo(a)pyrene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Benzo(b)fluoranthene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Benzo(g,h,i)perylene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Benzo(k)fluoranthene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Bis(2-chloroethoxy)methane	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Bis(2-chloroethyl)ether	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Bis(2-chloroisopropyl)ether	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Bis(2-ethylhexyl)phthalate	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Butyl benzyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Caprolactam	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Carbazole	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Chrysene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Di-n-butyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Di-n-octyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Dibenz(a,h)anthracene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Dibenzofuran	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Diethyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Dimethyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Fluoranthene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Fluorene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Hexachlorobenzene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Hexachlorobutadiene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Hexachlorocyclopentadiene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Hexachloroethane	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Isophorone	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
N-Nitrosodi-n-propylamine	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
N-Nitrosodiphenylamine	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Naphthalene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Nitrobenzene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Pentachlorophenol	BRL	25		ug/L	269745	1	11/05/2018 19:30	YH
Phenanthrene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Phenol	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Pyrene	BRL	10		ug/L	269745	1	11/05/2018 19:30	YH
Surr: 2,4,6-Tribromophenol	92.2	47-127		%REC	269745	1	11/05/2018 19:30	YH
Surr: 2-Fluorobiphenyl	92	47.4-119		%REC	269745	1	11/05/2018 19:30	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-19
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 11:00:00 AM
Lab ID:	1811270-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3510C)**				
Surr: 2-Fluorophenol	60.2	26.2-120		%REC	269745	1	11/05/2018 19:30	YH
Surr: 4-Terphenyl-d14	94.8	45-133		%REC	269745	1	11/05/2018 19:30	YH
Surr: Nitrobenzene-d5	86.6	41.9-121		%REC	269745	1	11/05/2018 19:30	YH
Surr: Phenol-d5	44.6	17.8-120		%REC	269745	1	11/05/2018 19:30	YH
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,1-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,1-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,2-Dibromoethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,2-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,2-Dichloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
2-Butanone	BRL	50		ug/L	270117	1	11/10/2018 15:40	JE
2-Hexanone	BRL	10		ug/L	270117	1	11/10/2018 15:40	JE
4-Methyl-2-pentanone	BRL	10		ug/L	270117	1	11/10/2018 15:40	JE
Acetone	BRL	50		ug/L	270117	1	11/10/2018 15:40	JE
Benzene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Bromodichloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Bromoform	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Bromomethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Carbon disulfide	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Carbon tetrachloride	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Chlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Chloroethane	BRL	10		ug/L	270117	1	11/10/2018 15:40	JE
Chloroform	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Chloromethane	BRL	10		ug/L	270117	1	11/10/2018 15:40	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Cyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Dibromochloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Dichlorodifluoromethane	BRL	10		ug/L	270117	1	11/10/2018 15:40	JE
Ethylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Freon-113	BRL	10		ug/L	270117	1	11/10/2018 15:40	JE
Isopropylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-19
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 11:00:00 AM
Lab ID:	1811270-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
m,p-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Methyl acetate	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Methylcyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Methylene chloride	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
o-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Styrene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Tetrachloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Toluene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Trichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Trichlorofluoromethane	BRL	5.0		ug/L	270117	1	11/10/2018 15:40	JE
Vinyl chloride	BRL	2.0		ug/L	270117	1	11/10/2018 15:40	JE
Surr: 4-Bromofluorobenzene	101	68-127		%REC	270117	1	11/10/2018 15:40	JE
Surr: Dibromofluoromethane	98.9	84.4-122		%REC	270117	1	11/10/2018 15:40	JE
Surr: Toluene-d8	102	80.1-116		%REC	270117	1	11/10/2018 15:40	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	0.50		ug/L	269872	1	11/07/2018 21:05	UH
Aroclor 1221	BRL	0.50		ug/L	269872	1	11/07/2018 21:05	UH
Aroclor 1232	BRL	0.50		ug/L	269872	1	11/07/2018 21:05	UH
Aroclor 1242	BRL	0.50		ug/L	269872	1	11/07/2018 21:05	UH
Aroclor 1248	BRL	0.50		ug/L	269872	1	11/07/2018 21:05	UH
Aroclor 1254	BRL	0.50		ug/L	269872	1	11/07/2018 21:05	UH
Aroclor 1260	BRL	0.50		ug/L	269872	1	11/07/2018 21:05	UH
Surr: Decachlorobiphenyl	91.3	31.2-130		%REC	269872	1	11/07/2018 21:05	UH
Surr: Tetrachloro-m-xylene	64.4	46.2-120		%REC	269872	1	11/07/2018 21:05	UH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-18
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 11:48:00 AM
Lab ID:	1811270-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Antimony	BRL	5.00		ug/L	269757	1	11/07/2018 03:21	JW
Arsenic	BRL	5.00		ug/L	269757	1	11/07/2018 03:21	JW
Barium	381	10.0		ug/L	269757	1	11/07/2018 03:21	JW
Beryllium	BRL	1.00		ug/L	269757	1	11/07/2018 03:21	JW
Cadmium	BRL	0.700		ug/L	269757	1	11/07/2018 03:21	JW
Chromium	BRL	5.00		ug/L	269757	1	11/07/2018 03:21	JW
Copper	BRL	2.00		ug/L	269757	1	11/07/2018 03:21	JW
Lead	BRL	1.00		ug/L	269757	1	11/07/2018 03:21	JW
Nickel	57.7	5.00		ug/L	269757	1	11/07/2018 03:21	JW
Selenium	BRL	5.00		ug/L	269757	1	11/07/2018 03:21	JW
Silver	BRL	1.00		ug/L	269757	1	11/07/2018 03:21	JW
Thallium	BRL	1.00		ug/L	269757	1	11/07/2018 03:21	JW
Zinc	BRL	10.0		ug/L	269757	1	11/07/2018 03:21	JW
TCL-SEMIVOLATILE ORGANICS SW8270D					**(SW3510C)**			
1,1´-Biphenyl	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2,4,5-Trichlorophenol	BRL	25		ug/L	269745	1	11/05/2018 21:41	YH
2,4,6-Trichlorophenol	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2,4-Dichlorophenol	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2,4-Dimethylphenol	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2,4-Dinitrophenol	BRL	25		ug/L	269745	1	11/05/2018 21:41	YH
2,4-Dinitrotoluene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2,6-Dinitrotoluene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2-Chloronaphthalene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2-Chlorophenol	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2-Methylnaphthalene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2-Methylphenol	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
2-Nitroaniline	BRL	25		ug/L	269745	1	11/05/2018 21:41	YH
2-Nitrophenol	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
3,3´-Dichlorobenzidine	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
3-Nitroaniline	BRL	25		ug/L	269745	1	11/05/2018 21:41	YH
4,6-Dinitro-2-methylphenol	BRL	25		ug/L	269745	1	11/05/2018 21:41	YH
4-Bromophenyl phenyl ether	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
4-Chloro-3-methylphenol	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
4-Chloroaniline	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
4-Chlorophenyl phenyl ether	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
4-Methylphenol	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
4-Nitroaniline	BRL	25		ug/L	269745	1	11/05/2018 21:41	YH
4-Nitrophenol	BRL	25		ug/L	269745	1	11/05/2018 21:41	YH
Acenaphthene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Acenaphthylene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-18
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 11:48:00 AM
Lab ID:	1811270-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3510C)**				
Acetophenone	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Anthracene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Atrazine	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Benz(a)anthracene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Benzaldehyde	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Benzo(a)pyrene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Benzo(b)fluoranthene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Benzo(g,h,i)perylene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Benzo(k)fluoranthene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Bis(2-chloroethoxy)methane	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Bis(2-chloroethyl)ether	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Bis(2-chloroisopropyl)ether	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Bis(2-ethylhexyl)phthalate	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Butyl benzyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Caprolactam	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Carbazole	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Chrysene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Di-n-butyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Di-n-octyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Dibenz(a,h)anthracene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Dibenzofuran	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Diethyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Dimethyl phthalate	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Fluoranthene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Fluorene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Hexachlorobenzene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Hexachlorobutadiene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Hexachlorocyclopentadiene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Hexachloroethane	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Isophorone	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
N-Nitrosodi-n-propylamine	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
N-Nitrosodiphenylamine	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Naphthalene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Nitrobenzene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Pentachlorophenol	BRL	25		ug/L	269745	1	11/05/2018 21:41	YH
Phenanthrene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Phenol	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Pyrene	BRL	10		ug/L	269745	1	11/05/2018 21:41	YH
Surr: 2,4,6-Tribromophenol	73.7	47-127		%REC	269745	1	11/05/2018 21:41	YH
Surr: 2-Fluorobiphenyl	79.2	47.4-119		%REC	269745	1	11/05/2018 21:41	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-18
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 11:48:00 AM
Lab ID:	1811270-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3510C)**				
Surr: 2-Fluorophenol	40.9	26.2-120		%REC	269745	1	11/05/2018 21:41	YH
Surr: 4-Terphenyl-d14	65.8	45-133		%REC	269745	1	11/05/2018 21:41	YH
Surr: Nitrobenzene-d5	79.6	41.9-121		%REC	269745	1	11/05/2018 21:41	YH
Surr: Phenol-d5	28.8	17.8-120		%REC	269745	1	11/05/2018 21:41	YH
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,1-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,1-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,2-Dibromoethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,2-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,2-Dichloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
2-Butanone	BRL	50		ug/L	270117	1	11/10/2018 18:35	JE
2-Hexanone	BRL	10		ug/L	270117	1	11/10/2018 18:35	JE
4-Methyl-2-pentanone	BRL	10		ug/L	270117	1	11/10/2018 18:35	JE
Acetone	BRL	50		ug/L	270117	1	11/10/2018 18:35	JE
Benzene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Bromodichloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Bromoform	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Bromomethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Carbon disulfide	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Carbon tetrachloride	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Chlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Chloroethane	BRL	10		ug/L	270117	1	11/10/2018 18:35	JE
Chloroform	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Chloromethane	BRL	10		ug/L	270117	1	11/10/2018 18:35	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Cyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Dibromochloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Dichlorodifluoromethane	BRL	10		ug/L	270117	1	11/10/2018 18:35	JE
Ethylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Freon-113	BRL	10		ug/L	270117	1	11/10/2018 18:35	JE
Isopropylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-18
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 11:48:00 AM
Lab ID:	1811270-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
m,p-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Methyl acetate	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Methylcyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Methylene chloride	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
o-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Styrene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Tetrachloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Toluene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Trichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Trichlorofluoromethane	BRL	5.0		ug/L	270117	1	11/10/2018 18:35	JE
Vinyl chloride	BRL	2.0		ug/L	270117	1	11/10/2018 18:35	JE
Surr: 4-Bromofluorobenzene	106	68-127		%REC	270117	1	11/10/2018 18:35	JE
Surr: Dibromofluoromethane	105	84.4-122		%REC	270117	1	11/10/2018 18:35	JE
Surr: Toluene-d8	99.4	80.1-116		%REC	270117	1	11/10/2018 18:35	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	0.50		ug/L	269872	1	11/07/2018 21:16	UH
Aroclor 1221	BRL	0.50		ug/L	269872	1	11/07/2018 21:16	UH
Aroclor 1232	BRL	0.50		ug/L	269872	1	11/07/2018 21:16	UH
Aroclor 1242	BRL	0.50		ug/L	269872	1	11/07/2018 21:16	UH
Aroclor 1248	BRL	0.50		ug/L	269872	1	11/07/2018 21:16	UH
Aroclor 1254	BRL	0.50		ug/L	269872	1	11/07/2018 21:16	UH
Aroclor 1260	BRL	0.50		ug/L	269872	1	11/07/2018 21:16	UH
Surr: Decachlorobiphenyl	97.3	31.2-130		%REC	269872	1	11/07/2018 21:16	UH
Surr: Tetrachloro-m-xylene	67.1	46.2-120		%REC	269872	1	11/07/2018 21:16	UH

Qualifiers:

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Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-17
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 2:41:00 PM
Lab ID:	1811270-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Antimony	BRL	5.00		ug/L	269757	1	11/07/2018 03:25	JW
Arsenic	BRL	5.00		ug/L	269757	1	11/07/2018 03:25	JW
Barium	123	10.0		ug/L	269757	1	11/07/2018 03:25	JW
Beryllium	BRL	1.00		ug/L	269757	1	11/07/2018 03:25	JW
Cadmium	BRL	0.700		ug/L	269757	1	11/07/2018 03:25	JW
Chromium	BRL	5.00		ug/L	269757	1	11/07/2018 03:25	JW
Copper	BRL	2.00		ug/L	269757	1	11/07/2018 03:25	JW
Lead	BRL	1.00		ug/L	269757	1	11/07/2018 03:25	JW
Nickel	BRL	5.00		ug/L	269757	1	11/07/2018 03:25	JW
Selenium	BRL	5.00		ug/L	269757	1	11/07/2018 03:25	JW
Silver	BRL	1.00		ug/L	269757	1	11/07/2018 03:25	JW
Thallium	BRL	1.00		ug/L	269757	1	11/07/2018 03:25	JW
Zinc	BRL	10.0		ug/L	269757	1	11/07/2018 03:25	JW
TCL-SEMIVOLATILE ORGANICS SW8270D					**(SW3510C)**			
1,1´-Biphenyl	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2,4,5-Trichlorophenol	BRL	25		ug/L	269745	1	11/06/2018 01:01	YH
2,4,6-Trichlorophenol	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2,4-Dichlorophenol	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2,4-Dimethylphenol	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2,4-Dinitrophenol	BRL	25		ug/L	269745	1	11/06/2018 01:01	YH
2,4-Dinitrotoluene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2,6-Dinitrotoluene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2-Chloronaphthalene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2-Chlorophenol	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2-Methylnaphthalene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2-Methylphenol	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
2-Nitroaniline	BRL	25		ug/L	269745	1	11/06/2018 01:01	YH
2-Nitrophenol	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
3,3´-Dichlorobenzidine	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
3-Nitroaniline	BRL	25		ug/L	269745	1	11/06/2018 01:01	YH
4,6-Dinitro-2-methylphenol	BRL	25		ug/L	269745	1	11/06/2018 01:01	YH
4-Bromophenyl phenyl ether	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
4-Chloro-3-methylphenol	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
4-Chloroaniline	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
4-Chlorophenyl phenyl ether	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
4-Methylphenol	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
4-Nitroaniline	BRL	25		ug/L	269745	1	11/06/2018 01:01	YH
4-Nitrophenol	BRL	25		ug/L	269745	1	11/06/2018 01:01	YH
Acenaphthene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Acenaphthylene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
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N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-17
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 2:41:00 PM
Lab ID:	1811270-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3510C)**				
Acetophenone	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Anthracene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Atrazine	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Benz(a)anthracene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Benzaldehyde	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Benzo(a)pyrene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Benzo(b)fluoranthene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Benzo(g,h,i)perylene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Benzo(k)fluoranthene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Bis(2-chloroethoxy)methane	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Bis(2-chloroethyl)ether	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Bis(2-chloroisopropyl)ether	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Bis(2-ethylhexyl)phthalate	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Butyl benzyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Caprolactam	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Carbazole	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Chrysene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Di-n-butyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Di-n-octyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Dibenz(a,h)anthracene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Dibenzofuran	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Diethyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Dimethyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Fluoranthene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Fluorene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Hexachlorobenzene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Hexachlorobutadiene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Hexachlorocyclopentadiene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Hexachloroethane	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Isophorone	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
N-Nitrosodi-n-propylamine	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
N-Nitrosodiphenylamine	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Naphthalene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Nitrobenzene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Pentachlorophenol	BRL	25		ug/L	269745	1	11/06/2018 01:01	YH
Phenanthrene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Phenol	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Pyrene	BRL	10		ug/L	269745	1	11/06/2018 01:01	YH
Surr: 2,4,6-Tribromophenol	110	47-127		%REC	269745	1	11/06/2018 01:01	YH
Surr: 2-Fluorobiphenyl	102	47.4-119		%REC	269745	1	11/06/2018 01:01	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-17
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 2:41:00 PM
Lab ID:	1811270-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3510C)**				
Surr: 2-Fluorophenol	49.7	26.2-120		%REC	269745	1	11/06/2018 01:01	YH
Surr: 4-Terphenyl-d14	97.2	45-133		%REC	269745	1	11/06/2018 01:01	YH
Surr: Nitrobenzene-d5	98	41.9-121		%REC	269745	1	11/06/2018 01:01	YH
Surr: Phenol-d5	32.4	17.8-120		%REC	269745	1	11/06/2018 01:01	YH
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,1-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,1-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,2-Dibromoethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,2-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,2-Dichloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
2-Butanone	BRL	50		ug/L	270117	1	11/10/2018 20:15	JE
2-Hexanone	BRL	10		ug/L	270117	1	11/10/2018 20:15	JE
4-Methyl-2-pentanone	BRL	10		ug/L	270117	1	11/10/2018 20:15	JE
Acetone	BRL	50		ug/L	270117	1	11/10/2018 20:15	JE
Benzene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Bromodichloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Bromoform	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Bromomethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Carbon disulfide	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Carbon tetrachloride	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Chlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Chloroethane	BRL	10		ug/L	270117	1	11/10/2018 20:15	JE
Chloroform	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Chloromethane	BRL	10		ug/L	270117	1	11/10/2018 20:15	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Cyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Dibromochloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Dichlorodifluoromethane	BRL	10		ug/L	270117	1	11/10/2018 20:15	JE
Ethylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Freon-113	BRL	10		ug/L	270117	1	11/10/2018 20:15	JE
Isopropylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-17
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 2:41:00 PM
Lab ID:	1811270-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
m,p-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Methyl acetate	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Methylcyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Methylene chloride	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
o-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Styrene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Tetrachloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Toluene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Trichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Trichlorofluoromethane	BRL	5.0		ug/L	270117	1	11/10/2018 20:15	JE
Vinyl chloride	BRL	2.0		ug/L	270117	1	11/10/2018 20:15	JE
Surr: 4-Bromofluorobenzene	104	68-127		%REC	270117	1	11/10/2018 20:15	JE
Surr: Dibromofluoromethane	105	84.4-122		%REC	270117	1	11/10/2018 20:15	JE
Surr: Toluene-d8	99.7	80.1-116		%REC	270117	1	11/10/2018 20:15	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	0.50		ug/L	269872	1	11/08/2018 08:16	UH
Aroclor 1221	BRL	0.50		ug/L	269872	1	11/08/2018 08:16	UH
Aroclor 1232	BRL	0.50		ug/L	269872	1	11/08/2018 08:16	UH
Aroclor 1242	BRL	0.50		ug/L	269872	1	11/08/2018 08:16	UH
Aroclor 1248	BRL	0.50		ug/L	269872	1	11/08/2018 08:16	UH
Aroclor 1254	BRL	0.50		ug/L	269872	1	11/08/2018 08:16	UH
Aroclor 1260	BRL	0.50		ug/L	269872	1	11/08/2018 08:16	UH
Surr: Decachlorobiphenyl	102	31.2-130		%REC	269872	1	11/08/2018 08:16	UH
Surr: Tetrachloro-m-xylene	70.5	46.2-120		%REC	269872	1	11/08/2018 08:16	UH

Qualifiers:

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N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
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Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-16
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 3:12:00 PM
Lab ID:	1811270-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Antimony	BRL	5.00		ug/L	269757	1	11/07/2018 02:33	JW
Arsenic	BRL	5.00		ug/L	269757	1	11/07/2018 02:33	JW
Barium	217	10.0		ug/L	269757	1	11/07/2018 02:33	JW
Beryllium	BRL	1.00		ug/L	269757	1	11/07/2018 02:33	JW
Cadmium	BRL	0.700		ug/L	269757	1	11/07/2018 02:33	JW
Chromium	BRL	5.00		ug/L	269757	1	11/07/2018 02:33	JW
Copper	BRL	2.00		ug/L	269757	1	11/07/2018 02:33	JW
Lead	BRL	1.00		ug/L	269757	1	11/07/2018 02:33	JW
Nickel	BRL	5.00		ug/L	269757	1	11/07/2018 02:33	JW
Selenium	BRL	5.00		ug/L	269757	1	11/07/2018 02:33	JW
Silver	BRL	1.00		ug/L	269757	1	11/07/2018 02:33	JW
Thallium	BRL	1.00		ug/L	269757	1	11/07/2018 02:33	JW
Zinc	BRL	10.0		ug/L	269757	1	11/07/2018 02:33	JW
TCL-SEMIVOLATILE ORGANICS SW8270D					**(SW3510C)**			
1,1´-Biphenyl	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2,4,5-Trichlorophenol	BRL	25		ug/L	269745	1	11/06/2018 19:47	YH
2,4,6-Trichlorophenol	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2,4-Dichlorophenol	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2,4-Dimethylphenol	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2,4-Dinitrophenol	BRL	25		ug/L	269745	1	11/06/2018 19:47	YH
2,4-Dinitrotoluene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2,6-Dinitrotoluene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2-Chloronaphthalene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2-Chlorophenol	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2-Methylnaphthalene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2-Methylphenol	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
2-Nitroaniline	BRL	25		ug/L	269745	1	11/06/2018 19:47	YH
2-Nitrophenol	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
3,3´-Dichlorobenzidine	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
3-Nitroaniline	BRL	25		ug/L	269745	1	11/06/2018 19:47	YH
4,6-Dinitro-2-methylphenol	BRL	25		ug/L	269745	1	11/06/2018 19:47	YH
4-Bromophenyl phenyl ether	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
4-Chloro-3-methylphenol	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
4-Chloroaniline	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
4-Chlorophenyl phenyl ether	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
4-Methylphenol	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
4-Nitroaniline	BRL	25		ug/L	269745	1	11/06/2018 19:47	YH
4-Nitrophenol	BRL	25		ug/L	269745	1	11/06/2018 19:47	YH
Acenaphthene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Acenaphthylene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-16
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 3:12:00 PM
Lab ID:	1811270-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3510C)**				
Acetophenone	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Anthracene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Atrazine	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Benz(a)anthracene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Benzaldehyde	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Benzo(a)pyrene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Benzo(b)fluoranthene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Benzo(g,h,i)perylene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Benzo(k)fluoranthene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Bis(2-chloroethoxy)methane	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Bis(2-chloroethyl)ether	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Bis(2-chloroisopropyl)ether	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Bis(2-ethylhexyl)phthalate	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Butyl benzyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Caprolactam	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Carbazole	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Chrysene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Di-n-butyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Di-n-octyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Dibenz(a,h)anthracene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Dibenzofuran	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Diethyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Dimethyl phthalate	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Fluoranthene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Fluorene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Hexachlorobenzene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Hexachlorobutadiene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Hexachlorocyclopentadiene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Hexachloroethane	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Indeno(1,2,3-cd)pyrene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Isophorone	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
N-Nitrosodi-n-propylamine	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
N-Nitrosodiphenylamine	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Naphthalene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Nitrobenzene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Pentachlorophenol	BRL	25		ug/L	269745	1	11/06/2018 19:47	YH
Phenanthrene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Phenol	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Pyrene	BRL	10		ug/L	269745	1	11/06/2018 19:47	YH
Surr: 2,4,6-Tribromophenol	89.8	47-127		%REC	269745	1	11/06/2018 19:47	YH
Surr: 2-Fluorobiphenyl	88.3	47.4-119		%REC	269745	1	11/06/2018 19:47	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-16
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 3:12:00 PM
Lab ID:	1811270-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL-SEMIVOLATILE ORGANICS SW8270D				**(SW3510C)**				
Surr: 2-Fluorophenol	22.2	26.2-120	S	%REC	269745	1	11/06/2018 19:47	YH
Surr: 4-Terphenyl-d14	73.8	45-133		%REC	269745	1	11/06/2018 19:47	YH
Surr: Nitrobenzene-d5	77.7	41.9-121		%REC	269745	1	11/06/2018 19:47	YH
Surr: Phenol-d5	15.3	17.8-120	S	%REC	269745	1	11/06/2018 19:47	YH
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,1-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,1-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,2-Dibromoethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,2-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,2-Dichloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
2-Butanone	BRL	50		ug/L	270117	1	11/10/2018 19:01	JE
2-Hexanone	BRL	10		ug/L	270117	1	11/10/2018 19:01	JE
4-Methyl-2-pentanone	BRL	10		ug/L	270117	1	11/10/2018 19:01	JE
Acetone	BRL	50		ug/L	270117	1	11/10/2018 19:01	JE
Benzene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Bromodichloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Bromoform	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Bromomethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Carbon disulfide	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Carbon tetrachloride	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Chlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Chloroethane	BRL	10		ug/L	270117	1	11/10/2018 19:01	JE
Chloroform	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Chloromethane	BRL	10		ug/L	270117	1	11/10/2018 19:01	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Cyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Dibromochloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Dichlorodifluoromethane	BRL	10		ug/L	270117	1	11/10/2018 19:01	JE
Ethylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Freon-113	BRL	10		ug/L	270117	1	11/10/2018 19:01	JE
Isopropylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	MW-16
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018 3:12:00 PM
Lab ID:	1811270-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
m,p-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Methyl acetate	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Methylcyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Methylene chloride	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
o-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Styrene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Tetrachloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Toluene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Trichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Trichlorofluoromethane	BRL	5.0		ug/L	270117	1	11/10/2018 19:01	JE
Vinyl chloride	BRL	2.0		ug/L	270117	1	11/10/2018 19:01	JE
Surr: 4-Bromofluorobenzene	104	68-127		%REC	270117	1	11/10/2018 19:01	JE
Surr: Dibromofluoromethane	101	84.4-122		%REC	270117	1	11/10/2018 19:01	JE
Surr: Toluene-d8	99.1	80.1-116		%REC	270117	1	11/10/2018 19:01	JE
POLYCHLORINATED BIPHENYLS SW8082A				**(SW3510C)**				
Aroclor 1016	BRL	0.50		ug/L	269872	1	11/07/2018 20:54	UH
Aroclor 1221	BRL	0.50		ug/L	269872	1	11/07/2018 20:54	UH
Aroclor 1232	BRL	0.50		ug/L	269872	1	11/07/2018 20:54	UH
Aroclor 1242	BRL	0.50		ug/L	269872	1	11/07/2018 20:54	UH
Aroclor 1248	BRL	0.50		ug/L	269872	1	11/07/2018 20:54	UH
Aroclor 1254	BRL	0.50		ug/L	269872	1	11/07/2018 20:54	UH
Aroclor 1260	BRL	0.50		ug/L	269872	1	11/07/2018 20:54	UH
Surr: Decachlorobiphenyl	91.8	31.2-130		%REC	269872	1	11/07/2018 20:54	UH
Surr: Tetrachloro-m-xylene	71.2	46.2-120		%REC	269872	1	11/07/2018 20:54	UH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	TRIP BLANK
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018
Lab ID:	1811270-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,1-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,1-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,2-Dibromoethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,2-Dichloroethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,2-Dichloropropane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
2-Butanone	BRL	50		ug/L	270117	1	11/10/2018 13:35	JE
2-Hexanone	BRL	10		ug/L	270117	1	11/10/2018 13:35	JE
4-Methyl-2-pentanone	BRL	10		ug/L	270117	1	11/10/2018 13:35	JE
Acetone	BRL	50		ug/L	270117	1	11/10/2018 13:35	JE
Benzene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Bromodichloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Bromoform	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Bromomethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Carbon disulfide	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Carbon tetrachloride	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Chlorobenzene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Chloroethane	BRL	10		ug/L	270117	1	11/10/2018 13:35	JE
Chloroform	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Chloromethane	BRL	10		ug/L	270117	1	11/10/2018 13:35	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Cyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Dibromochloromethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Dichlorodifluoromethane	BRL	10		ug/L	270117	1	11/10/2018 13:35	JE
Ethylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Freon-113	BRL	10		ug/L	270117	1	11/10/2018 13:35	JE
Isopropylbenzene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
m,p-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Methyl acetate	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Methylcyclohexane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Methylene chloride	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
o-Xylene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	TRIP BLANK
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018
Lab ID:	1811270-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Tetrachloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Toluene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Trichloroethene	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Trichlorofluoromethane	BRL	5.0		ug/L	270117	1	11/10/2018 13:35	JE
Vinyl chloride	BRL	2.0		ug/L	270117	1	11/10/2018 13:35	JE
Surr: 4-Bromofluorobenzene	103	68-127		%REC	270117	1	11/10/2018 13:35	JE
Surr: Dibromofluoromethane	104	84.4-122		%REC	270117	1	11/10/2018 13:35	JE
Surr: Toluene-d8	99.9	80.1-116		%REC	270117	1	11/10/2018 13:35	JE

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	TRIP BLANK 2
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018
Lab ID:	1811270-006	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,1,2-Trichloroethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,1-Dichloroethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,1-Dichloroethene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,2-Dibromoethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,2-Dichlorobenzene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,2-Dichloroethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,2-Dichloropropane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,3-Dichlorobenzene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
1,4-Dichlorobenzene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
2-Butanone	BRL	50		ug/L	269907	1	11/09/2018 09:45	JE
2-Hexanone	BRL	10		ug/L	269907	1	11/09/2018 09:45	JE
4-Methyl-2-pentanone	BRL	10		ug/L	269907	1	11/09/2018 09:45	JE
Acetone	BRL	50		ug/L	269907	1	11/09/2018 09:45	JE
Benzene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Bromodichloromethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Bromoform	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Bromomethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Carbon disulfide	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Carbon tetrachloride	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Chlorobenzene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Chloroethane	BRL	10		ug/L	269907	1	11/09/2018 09:45	JE
Chloroform	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Chloromethane	BRL	10		ug/L	269907	1	11/09/2018 09:45	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
cis-1,3-Dichloropropene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Cyclohexane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Dibromochloromethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Dichlorodifluoromethane	BRL	10		ug/L	269907	1	11/09/2018 09:45	JE
Ethylbenzene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Freon-113	BRL	10		ug/L	269907	1	11/09/2018 09:45	JE
Isopropylbenzene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
m,p-Xylene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Methyl acetate	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Methyl tert-butyl ether	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Methylcyclohexane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Methylene chloride	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
o-Xylene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Nov-18

Client:	Georgia Power Company	**Client Sample ID:**	TRIP BLANK 2
Project Name:	Plant Kraft	**Collection Date:**	11/1/2018
Lab ID:	1811270-006	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Tetrachloroethene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Toluene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
trans-1,3-Dichloropropene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Trichloroethene	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Trichlorofluoromethane	BRL	5.0		ug/L	269907	1	11/09/2018 09:45	JE
Vinyl chloride	BRL	2.0		ug/L	269907	1	11/09/2018 09:45	JE
Surr: 4-Bromofluorobenzene	102	68-127		%REC	269907	1	11/09/2018 09:45	JE
Surr: Dibromofluoromethane	102	84.4-122		%REC	269907	1	11/09/2018 09:45	JE
Surr: Toluene-d8	101	80.1-116		%REC	269907	1	11/09/2018 09:45	JE

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

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AES ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Georgia Power Company** AES Work Order Number: **1811270**

2. Carrier: FedEx ☐ UPS ☐ USPS ☐ Client ■ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	●	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	●	○		
5.	Custody seals intact on shipping container?	○	○	●		
6.	Temperature blanks present?	●	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	●	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	●	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	●	○	○		
10.	Sampler name and/or signature on COC?	●	○	○		
11.	Were all samples received within holding time?	●	○	○		
12.	TAT marked on the COC?	●	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 0.3 °C Cooler 2 Temperature 0.4 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 11/2/18

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	●	○	○		
17.	Custody seals present on sample containers?	○	●	○		
18.	Custody seals intact on sample containers?	○	○	●		
19.	Do sample container labels match the COC?	●	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	●	○	○		
21.	Were all of the samples listed on the COC received?	●	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	●	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	●	○	○		
24.	Were samples received in appropriate containers?	●	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	●	○	○		
26.	Were trip blanks submitted?	●	○	○	listed on COC ☐ not listed on COC ■	

27. Comments: _____

This section only applies to samples where pH can be checked at Sample Receipt.

I certify that I have completed sections 16-27 (dated initials). EW 11/3/18

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	●	○	○		
29.	Containers meet preservation guidelines?	●	○	○		
30.	Was pH adjusted at Sample Receipt?	○	○	●		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). EW 11/3/18

Locked

AES, Inc.
3080 Presidential Drive
Atlanta GA 30340

pH Adjustment Sheet

AES Sample ID number	Test Requested	pH as Received	Required pH	Preservative Required	Lot # of Preservative	Amount Added mL or Pellets*	Final pH	Tech's Initials	Date	Time
1811270-003C	6020_W	6	<2	HNO_3	MET-838-12	0.5 mL Pellets	1	MCM	11/8/18	2:25pm
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				

* Number of Pellets when adding NAOH

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269745

Sample ID: **MB-269745** Client ID: Units: **ug/L** Prep Date: **11/05/2018** Run No: **383919**
SampleType: **MBLK** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **269745** Analysis Date: **11/05/2018** Seq No: **8572392**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1´-Biphenyl	BRL	10									
2,4,5-Trichlorophenol	BRL	25									
2,4,6-Trichlorophenol	BRL	10									
2,4-Dichlorophenol	BRL	10									
2,4-Dimethylphenol	BRL	10									
2,4-Dinitrophenol	BRL	25									
2,4-Dinitrotoluene	BRL	10									
2,6-Dinitrotoluene	BRL	10									
2-Chloronaphthalene	BRL	10									
2-Chlorophenol	BRL	10									
2-Methylnaphthalene	BRL	10									
2-Methylphenol	BRL	10									
2-Nitroaniline	BRL	25									
2-Nitrophenol	BRL	10									
3,3´-Dichlorobenzidine	BRL	10									
3-Nitroaniline	BRL	25									
4,6-Dinitro-2-methylphenol	BRL	25									
4-Bromophenyl phenyl ether	BRL	10									
4-Chloro-3-methylphenol	BRL	10									
4-Chloroaniline	BRL	10									
4-Chlorophenyl phenyl ether	BRL	10									
4-Methylphenol	BRL	10									
4-Nitroaniline	BRL	25									
4-Nitrophenol	BRL	25									
Acenaphthene	BRL	10									
Acenaphthylene	BRL	10									
Acetophenone	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269745

Sample ID: **MB-269745** Client ID: Units: **ug/L** Prep Date: **11/05/2018** Run No: **383919**
SampleType: **MBLK** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **269745** Analysis Date: **11/05/2018** Seq No: **8572392**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Anthracene	BRL	10									
Atrazine	BRL	10									
Benz(a)anthracene	BRL	10									
Benzaldehyde	BRL	10									
Benzo(a)pyrene	BRL	10									
Benzo(b)fluoranthene	BRL	10									
Benzo(g,h,i)perylene	BRL	10									
Benzo(k)fluoranthene	BRL	10									
Bis(2-chloroethoxy)methane	BRL	10									
Bis(2-chloroethyl)ether	BRL	10									
Bis(2-chloroisopropyl)ether	BRL	10									
Bis(2-ethylhexyl)phthalate	BRL	10									
Butyl benzyl phthalate	BRL	10									
Caprolactam	BRL	10									
Carbazole	BRL	10									
Chrysene	BRL	10									
Di-n-butyl phthalate	BRL	10									
Di-n-octyl phthalate	BRL	10									
Dibenz(a,h)anthracene	BRL	10									
Dibenzofuran	BRL	10									
Diethyl phthalate	BRL	10									
Dimethyl phthalate	BRL	10									
Fluoranthene	BRL	10									
Fluorene	BRL	10									
Hexachlorobenzene	BRL	10									
Hexachlorobutadiene	BRL	10									
Hexachlorocyclopentadiene	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269745

Sample ID: **MB-269745** Client ID: Units: **ug/L** Prep Date: **11/05/2018** Run No: **383919**
SampleType: **MBLK** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **269745** Analysis Date: **11/05/2018** Seq No: **8572392**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Hexachloroethane	BRL	10									
Indeno(1,2,3-cd)pyrene	BRL	10									
Isophorone	BRL	10									
N-Nitrosodi-n-propylamine	BRL	10									
N-Nitrosodiphenylamine	BRL	10									
Naphthalene	BRL	10									
Nitrobenzene	BRL	10									
Pentachlorophenol	BRL	25									
Phenanthrene	BRL	10									
Phenol	BRL	10									
Pyrene	BRL	10									
Surr: 2,4,6-Tribromophenol	101.5	0	100.0		102	47	127				
Surr: 2-Fluorobiphenyl	50.50	0	50.00		101	47.4	119				
Surr: 2-Fluorophenol	50.28	0	100.0		50.3	26.2	120				
Surr: 4-Terphenyl-d14	44.57	0	50.00		89.1	45	133				
Surr: Nitrobenzene-d5	47.80	0	50.00		95.6	41.9	121				
Surr: Phenol-d5	33.10	0	100.0		33.1	17.8	120				

Sample ID: **LCS-269745** Client ID: Units: **ug/L** Prep Date: **11/05/2018** Run No: **383919**
SampleType: **LCS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **269745** Analysis Date: **11/05/2018** Seq No: **8572393**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	103.4	10	100.0		103	60.1	123				
2-Chlorophenol	95.85	10	100.0		95.8	50.6	120				
4-Chloro-3-methylphenol	108.5	10	100.0		108	59.5	122				
4-Nitrophenol	32.62	25	100.0		32.6	20	120				
Acenaphthene	114.1	10	100.0		114	60.5	119				
N-Nitrosodi-n-propylamine	111.8	10	100.0		112	62.3	127				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269745

Sample ID: **LCS-269745** Client ID: Units: **ug/L** Prep Date: **11/05/2018** Run No: **383919**
SampleType: **LCS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **269745** Analysis Date: **11/05/2018** Seq No: **8572393**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Pentachlorophenol	87.92	25	100.0		87.9	50.9	120				
Phenol	36.20	10	100.0		36.2	20.1	120				
Pyrene	115.0	10	100.0		115	68.8	139				
Surr: 2,4,6-Tribromophenol	122.9	0	100.0		123	47	127				
Surr: 2-Fluorobiphenyl	61.16	0	50.00		122	47.4	119				S
Surr: 2-Fluorophenol	57.24	0	100.0		57.2	26.2	120				
Surr: 4-Terphenyl-d14	64.29	0	50.00		129	45	133				
Surr: Nitrobenzene-d5	56.52	0	50.00		113	41.9	121				
Surr: Phenol-d5	38.07	0	100.0		38.1	17.8	120				

Sample ID: **1811270-001BMS** Client ID: **MW-19** Units: **ug/L** Prep Date: **11/05/2018** Run No: **383919**
SampleType: **MS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **269745** Analysis Date: **11/05/2018** Seq No: **8572395**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	78.84	9.8	98.04		80.4	50.3	123				
2-Chlorophenol	81.25	9.8	98.04		82.9	50.8	120				
4-Chloro-3-methylphenol	90.68	9.8	98.04		92.5	47.1	124				
4-Nitrophenol	45.77	25	98.04		46.7	21.8	120				
Acenaphthene	90.24	9.8	98.04		92.0	44.7	119				
N-Nitrosodi-n-propylamine	88.15	9.8	98.04		89.9	52.1	120				
Pentachlorophenol	68.69	25	98.04		70.1	40	120				
Phenol	48.87	9.8	98.04		49.8	31.5	120				
Pyrene	86.96	9.8	98.04		88.7	51	129				
Surr: 2,4,6-Tribromophenol	96.69	0	98.04		98.6	47	127				
Surr: 2-Fluorobiphenyl	47.90	0	49.02		97.7	47.4	119				
Surr: 2-Fluorophenol	63.47	0	98.04		64.7	26.2	120				
Surr: 4-Terphenyl-d14	49.82	0	49.02		102	45	133				
Surr: Nitrobenzene-d5	44.26	0	49.02		90.3	41.9	121				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269745

Sample ID: **1811270-001BMS** Client ID: **MW-19** Units: **ug/L** Prep Date: **11/05/2018** Run No: **383919**
SampleType: **MS** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **269745** Analysis Date: **11/05/2018** Seq No: **8572395**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Phenol-d5	50.54	0	98.04		51.6	17.8	120				

Sample ID: **1811270-001BMSD** Client ID: **MW-19** Units: **ug/L** Prep Date: **11/05/2018** Run No: **383919**
SampleType: **MSD** TestCode: **TCL-SEMIVOLATILE ORGANICS SW8270D** BatchID: **269745** Analysis Date: **11/05/2018** Seq No: **8572399**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	88.18	10	100.0		88.2	50.3	123	78.84	11.2	21.7	
2-Chlorophenol	83.97	10	100.0		84.0	50.8	120	81.25	3.30	24.8	
4-Chloro-3-methylphenol	97.47	10	100.0		97.5	47.1	124	90.68	7.22	20.7	
4-Nitrophenol	52.10	25	100.0		52.1	21.8	120	45.77	12.9	38.3	
Acenaphthene	96.56	10	100.0		96.6	44.7	119	90.24	6.77	20.5	
N-Nitrosodi-n-propylamine	92.53	10	100.0		92.5	52.1	120	88.15	4.85	29.2	
Pentachlorophenol	79.73	25	100.0		79.7	40	120	68.69	14.9	30.7	
Phenol	50.39	10	100.0		50.4	31.5	120	48.87	3.06	28.5	
Pyrene	98.41	10	100.0		98.4	51	129	86.96	12.4	24.8	
Surr: 2,4,6-Tribromophenol	102.6	0	100.0		103	47	127	96.69	0	0	
Surr: 2-Fluorobiphenyl	49.20	0	50.00		98.4	47.4	119	47.90	0	0	
Surr: 2-Fluorophenol	63.64	0	100.0		63.6	26.2	120	63.47	0	0	
Surr: 4-Terphenyl-d14	57.20	0	50.00		114	45	133	49.82	0	0	
Surr: Nitrobenzene-d5	44.61	0	50.00		89.2	41.9	121	44.26	0	0	
Surr: Phenol-d5	50.37	0	100.0		50.4	17.8	120	50.54	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269757

Sample ID: **MB-269757** Client ID: Units: **ug/L** Prep Date: **11/05/2018** Run No: **384122**
SampleType: **MBLK** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **269757** Analysis Date: **11/07/2018** Seq No: **8576818**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	10.0									
Beryllium	BRL	1.00									
Cadmium	BRL	0.700									
Chromium	BRL	5.00									
Copper	BRL	2.00									
Lead	BRL	1.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	1.00									
Thallium	BRL	1.00									
Zinc	BRL	10.0									

Sample ID: **LCS-269757** Client ID: Units: **ug/L** Prep Date: **11/05/2018** Run No: **384122**
SampleType: **LCS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **269757** Analysis Date: **11/07/2018** Seq No: **8576819**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	104.1	5.00	100.0		104	80	120				
Arsenic	103.0	5.00	100.0		103	80	120				
Barium	103.8	10.0	100.0		104	80	120				
Beryllium	107.7	1.00	100.0		108	80	120				
Cadmium	102.8	0.700	100.0		103	80	120				
Chromium	101.3	5.00	100.0		101	80	120				
Copper	100.4	2.00	100.0		100	80	120				
Lead	103.6	1.00	100.0		104	80	120				
Nickel	102.0	5.00	100.0		102	80	120				
Selenium	94.35	5.00	100.0		94.4	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269757

Sample ID: **LCS-269757** Client ID: Units: **ug/L** Prep Date: **11/05/2018** Run No: **384122**
SampleType: **LCS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **269757** Analysis Date: **11/07/2018** Seq No: **8576819**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Silver	9.822	1.00	10.00		98.2	80	120				
Thallium	93.80	1.00	100.0		93.8	80	120				
Zinc	102.1	10.0	100.0	1.895	100	80	120				

Sample ID: **1811270-004CMS** Client ID: **MW-16** Units: **ug/L** Prep Date: **11/05/2018** Run No: **384122**
SampleType: **MS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **269757** Analysis Date: **11/07/2018** Seq No: **8576821**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	103.0	5.00	100.0		103	75	125				
Arsenic	105.7	5.00	100.0		106	75	125				
Barium	301.5	10.0	100.0	216.6	84.9	75	125				
Beryllium	115.7	1.00	100.0		116	75	125				
Cadmium	98.32	0.700	100.0	0.1126	98.2	75	125				
Chromium	100.0	5.00	100.0		100	75	125				
Copper	100.7	2.00	100.0		101	75	125				
Lead	101.4	1.00	100.0		101	75	125				
Nickel	98.17	5.00	100.0	0.5538	97.6	75	125				
Selenium	96.35	5.00	100.0		96.3	75	125				
Silver	9.807	1.00	10.00		98.1	75	125				
Thallium	89.53	1.00	100.0		89.5	75	125				
Zinc	102.5	10.0	100.0	3.577	98.9	75	125				

Sample ID: **1811270-004CMSD** Client ID: **MW-16** Units: **ug/L** Prep Date: **11/05/2018** Run No: **384122**
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **269757** Analysis Date: **11/07/2018** Seq No: **8576822**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	107.7	5.00	100.0		108	75	125	103.0	4.41	20	
Arsenic	110.4	5.00	100.0		110	75	125	105.7	4.32	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269757

Sample ID: **1811270-004CMSD** Client ID: **MW-16** Units: **ug/L** Prep Date: **11/05/2018** Run No: **384122**
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **269757** Analysis Date: **11/07/2018** Seq No: **8576822**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	312.7	10.0	100.0	216.6	96.2	75	125	301.5	3.66	20	
Beryllium	127.5	1.00	100.0		128	75	125	115.7	9.74	20	S
Cadmium	99.34	0.700	100.0	0.1126	99.2	75	125	98.32	1.02	20	
Chromium	103.5	5.00	100.0		104	75	125	100.0	3.45	20	
Copper	104.5	2.00	100.0		104	75	125	100.7	3.63	20	
Lead	104.1	1.00	100.0		104	75	125	101.4	2.54	20	
Nickel	102.0	5.00	100.0	0.5538	101	75	125	98.17	3.85	20	
Selenium	100.8	5.00	100.0		101	75	125	96.35	4.54	20	
Silver	10.06	1.00	10.00		101	75	125	9.807	2.53	20	
Thallium	92.10	1.00	100.0		92.1	75	125	89.53	2.83	20	
Zinc	107.8	10.0	100.0	3.577	104	75	125	102.5	5.01	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269872

Sample ID: **MB-269872**	Client ID:		Units: **ug/L**	Prep Date: **11/07/2018**	Run No: **384193**
SampleType: **MBLK**	TestCode: **POLYCHLORINATED BIPHENYLS** **SW8082A**		BatchID: **269872**	Analysis Date: **11/07/2018**	Seq No: **8577045**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aroclor 1016	BRL	0.50									
Aroclor 1221	BRL	0.50									
Aroclor 1232	BRL	0.50									
Aroclor 1242	BRL	0.50									
Aroclor 1248	BRL	0.50									
Aroclor 1254	BRL	0.50									
Aroclor 1260	BRL	0.50									
Surr: Decachlorobiphenyl	0.3553	0	0.5000		71.1	31.2	130				
Surr: Tetrachloro-m-xylene	0.3346	0	0.5000		66.9	46.2	120				

Sample ID: **LCS-269872**	Client ID:		Units: **ug/L**	Prep Date: **11/07/2018**	Run No: **384193**
SampleType: **LCS**	TestCode: **POLYCHLORINATED BIPHENYLS** **SW8082A**		BatchID: **269872**	Analysis Date: **11/07/2018**	Seq No: **8577046**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aroclor 1016	4.398	0.50	5.000		88.0	67.7	121				
Aroclor 1260	4.356	0.50	5.000		87.1	63.1	124				
Surr: Decachlorobiphenyl	0.3614	0	0.5000		72.3	31.2	130				
Surr: Tetrachloro-m-xylene	0.3613	0	0.5000		72.3	46.2	120				

Sample ID: **1811270-002BMS**	Client ID: **MW-18**		Units: **ug/L**	Prep Date: **11/07/2018**	Run No: **384193**
SampleType: **MS**	TestCode: **POLYCHLORINATED BIPHENYLS** **SW8082A**		BatchID: **269872**	Analysis Date: **11/07/2018**	Seq No: **8577051**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aroclor 1016	4.360	0.50	5.000		87.2	62.7	129				
Aroclor 1260	4.540	0.50	5.000		90.8	51.6	127				
Surr: Decachlorobiphenyl	0.4713	0	0.5000		94.3	31.2	130				
Surr: Tetrachloro-m-xylene	0.3509	0	0.5000		70.2	46.2	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269872

Sample ID: **1811270-002BMSD** Client ID: **MW-18** Units: **ug/L** Prep Date: **11/07/2018** Run No: **384193**
SampleType: **MSD** TestCode: **POLYCHLORINATED BIPHENYLS SW8082A** BatchID: **269872** Analysis Date: **11/07/2018** Seq No: **8577052**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aroclor 1016	4.273	0.50	5.000		85.5	62.7	129	4.360	2.01	19	
Aroclor 1260	4.591	0.50	5.000		91.8	51.6	127	4.540	1.13	20.1	
Surr: Decachlorobiphenyl	0.4728	0	0.5000		94.6	31.2	130	0.4713	0	0	
Surr: Tetrachloro-m-xylene	0.3133	0	0.5000		62.7	46.2	120	0.3509	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269907

Sample ID: **MB-269907** Client ID: Units: **ug/L** Prep Date: **11/07/2018** Run No: **384118**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **269907** Analysis Date: **11/07/2018** Seq No: **8574738**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269907

Sample ID: **MB-269907** Client ID: Units: **ug/L** Prep Date: **11/07/2018** Run No: **384118**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **269907** Analysis Date: **11/07/2018** Seq No: **8574738**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	46.50	0	50.00		93.0	68	127				
Surr: Dibromofluoromethane	46.80	0	50.00		93.6	84.4	122				
Surr: Toluene-d8	49.27	0	50.00		98.5	80.1	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269907

Sample ID: **LCS-269907** Client ID: Units: **ug/L** Prep Date: **11/07/2018** Run No: **384118**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **269907** Analysis Date: **11/07/2018** Seq No: **8574737**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	52.45	5.0	50.00		105	69	136				
Benzene	52.36	5.0	50.00		105	73.7	126				
Chlorobenzene	50.54	5.0	50.00		101	73.5	124				
Toluene	53.07	5.0	50.00		106	76.8	125				
Trichloroethene	53.15	5.0	50.00		106	70.9	124				
Surr: 4-Bromofluorobenzene	47.76	0	50.00		95.5	68	127				
Surr: Dibromofluoromethane	47.08	0	50.00		94.2	84.4	122				
Surr: Toluene-d8	48.74	0	50.00		97.5	80.1	116				

Sample ID: **1811214-001AMS** Client ID: Units: **ug/L** Prep Date: **11/07/2018** Run No: **384361**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **269907** Analysis Date: **11/09/2018** Seq No: **8581606**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	52.22	5.0	50.00		104	65.7	143				
Benzene	51.44	5.0	50.00		103	66.1	137				
Chlorobenzene	51.20	5.0	50.00		102	70.9	132				
Toluene	50.38	5.0	50.00		101	63.8	141				
Trichloroethene	52.51	5.0	50.00		105	70.6	128				
Surr: 4-Bromofluorobenzene	50.99	0	50.00		102	68	127				
Surr: Dibromofluoromethane	50.98	0	50.00		102	84.4	122				
Surr: Toluene-d8	49.41	0	50.00		98.8	80.1	116				

Sample ID: **1811214-001AMSD** Client ID: Units: **ug/L** Prep Date: **11/07/2018** Run No: **384361**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **269907** Analysis Date: **11/09/2018** Seq No: **8581607**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	50.48	5.0	50.00		101	65.7	143	52.22	3.39	17.7	
Benzene	48.53	5.0	50.00		97.1	66.1	137	51.44	5.82	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 269907

Sample ID: **1811214-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/L** Prep Date: **11/07/2018** Run No: **384361**
BatchID: **269907** Analysis Date: **11/09/2018** Seq No: **8581607**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	49.56	5.0	50.00		99.1	70.9	132	51.20	3.26	20	
Toluene	48.43	5.0	50.00		96.9	63.8	141	50.38	3.95	20	
Trichloroethene	48.60	5.0	50.00		97.2	70.6	128	52.51	7.73	20	
Surr: 4-Bromofluorobenzene	51.94	0	50.00		104	68	127	50.99	0	0	
Surr: Dibromofluoromethane	50.69	0	50.00		101	84.4	122	50.98	0	0	
Surr: Toluene-d8	49.17	0	50.00		98.3	80.1	116	49.41	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 270117

Sample ID: **MB-270117** Client ID: Units: **ug/L** Prep Date: **11/10/2018** Run No: **384480**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **270117** Analysis Date: **11/10/2018** Seq No: **8583829**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 270117

Sample ID: **MB-270117** Client ID: Units: **ug/L** Prep Date: **11/10/2018** Run No: **384480**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **270117** Analysis Date: **11/10/2018** Seq No: **8583829**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	52.57	0	50.00		105	68	127				
Surr: Dibromofluoromethane	52.19	0	50.00		104	84.4	122				
Surr: Toluene-d8	49.26	0	50.00		98.5	80.1	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 270117

Sample ID: **LCS-270117** Client ID: Units: **ug/L** Prep Date: **11/10/2018** Run No: **384480**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **270117** Analysis Date: **11/10/2018** Seq No: **8583828**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	59.57	5.0	50.00		119	69	136				
Benzene	53.68	5.0	50.00		107	73.7	126				
Chlorobenzene	50.19	5.0	50.00		100	73.5	124				
Toluene	50.01	5.0	50.00		100	76.8	125				
Trichloroethene	52.64	5.0	50.00		105	70.9	124				
Surr: 4-Bromofluorobenzene	51.53	0	50.00		103	68	127				
Surr: Dibromofluoromethane	52.79	0	50.00		106	84.4	122				
Surr: Toluene-d8	48.47	0	50.00		96.9	80.1	116				

Sample ID: **1811593-018AMS** Client ID: Units: **ug/L** Prep Date: **11/10/2018** Run No: **384480**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **270117** Analysis Date: **11/10/2018** Seq No: **8583908**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	29640	2500	25000		119	65.7	143				
Benzene	27950	2500	25000	900.0	108	66.1	137				
Chlorobenzene	26110	2500	25000		104	70.9	132				
Toluene	47080	2500	25000	14880	129	63.8	141				
Trichloroethene	26910	2500	25000		108	70.6	128				
Surr: 4-Bromofluorobenzene	26000	0	25000		104	68	127				
Surr: Dibromofluoromethane	24900	0	25000		99.6	84.4	122				
Surr: Toluene-d8	25460	0	25000		102	80.1	116				

Sample ID: **1811593-018ADUP** Client ID: Units: **ug/L** Prep Date: **11/10/2018** Run No: **384480**
SampleType: **DUP** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **270117** Analysis Date: **11/10/2018** Seq No: **8583910**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	2500						0	0	20	
1,1,2,2-Tetrachloroethane	BRL	2500						0	0	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 270117

Sample ID: **1811593-018ADUP** Client ID: Units: **ug/L** Prep Date: **11/10/2018** Run No: **384480**
SampleType: **DUP** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **270117** Analysis Date: **11/10/2018** Seq No: **8583910**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	BRL	2500						0	0	20	
1,1-Dichloroethane	BRL	2500						0	0	20	
1,1-Dichloroethene	BRL	2500						0	0	20	
1,2,4-Trichlorobenzene	BRL	2500						0	0	20	
1,2-Dibromo-3-chloropropane	BRL	2500						0	0	20	
1,2-Dibromoethane	BRL	2500						0	0	20	
1,2-Dichlorobenzene	BRL	2500						0	0	20	
1,2-Dichloroethane	BRL	2500						0	0	20	
1,2-Dichloropropane	BRL	2500						0	0	20	
1,3-Dichlorobenzene	BRL	2500						0	0	20	
1,4-Dichlorobenzene	BRL	2500						0	0	20	
2-Butanone	BRL	25000						0	0	20	
2-Hexanone	BRL	5000						0	0	20	
4-Methyl-2-pentanone	BRL	5000						0	0	20	
Acetone	BRL	25000						0	0	20	
Benzene	BRL	2500						900.0	0	20	
Bromodichloromethane	BRL	2500						0	0	20	
Bromoform	BRL	2500						0	0	20	
Bromomethane	BRL	2500						0	0	20	
Carbon disulfide	BRL	2500						0	0	20	
Carbon tetrachloride	BRL	2500						0	0	20	
Chlorobenzene	BRL	2500						0	0	20	
Chloroethane	BRL	5000						0	0	20	
Chloroform	BRL	2500						0	0	20	
Chloromethane	BRL	5000						0	0	20	
cis-1,2-Dichloroethene	BRL	2500						0	0	20	
cis-1,3-Dichloropropene	BRL	2500						0	0	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Georgia Power Company
Project Name: Plant Kraft
Workorder: 1811270

ANALYTICAL QC SUMMARY REPORT

BatchID: 270117

Sample ID: **1811593-018ADUP** Client ID: Units: **ug/L** Prep Date: **11/10/2018** Run No: **384480**
SampleType: **DUP** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **270117** Analysis Date: **11/10/2018** Seq No: **8583910**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyclohexane	BRL	2500						0	0	20	
Dibromochloromethane	BRL	2500						0	0	20	
Dichlorodifluoromethane	BRL	5000						0	0	20	
Ethylbenzene	6620	2500						4810	31.7	20	R
Freon-113	BRL	5000						0	0	20	
Isopropylbenzene	BRL	2500						0	0	20	
m,p-Xylene	25260	2500						17690	35.3	20	R
Methyl acetate	BRL	2500						0	0	20	
Methyl tert-butyl ether	BRL	2500						0	0	20	
Methylcyclohexane	BRL	2500						0	0	20	
Methylene chloride	BRL	2500						0	0	20	
o-Xylene	10340	2500						7695	29.3	20	R
Styrene	BRL	2500						0	0	20	
Tetrachloroethene	BRL	2500						0	0	20	
Toluene	16190	2500						14880	8.40	20	
trans-1,2-Dichloroethene	BRL	2500						0	0	20	
trans-1,3-Dichloropropene	BRL	2500						0	0	20	
Trichloroethene	BRL	2500						0	0	20	
Trichlorofluoromethane	BRL	2500						0	0	20	
Vinyl chloride	BRL	1000						0	0	20	
Surr: 4-Bromofluorobenzene	25690	0				68	127	25960	0	0	
Surr: Dibromofluoromethane	24990	0				84.4	122	25120	0	0	
Surr: Toluene-d8	25270	0				80.1	116	24930	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

November 09, 2018

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Kraft Radium
Pace Project No.: 2610423

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 12, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Maria Padilla, Georgia Power
Lauren Petty, Southern Company Services, Inc.
Kevin Stephenson, Resolute Environmental & Water Resources Consulting, LLC
Rebecca Thornton, Pace Analytical Atlanta
Stephen Wilson, Resolute Environmental & Water Resources Consulting, LLC

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Kraft Radium
Pace Project No.: 2610423

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2610423001	**KMW-01**	Water	10/09/18 12:10	10/12/18 09:20
2610423002	**KMW-02**	Water	10/09/18 16:03	10/12/18 09:20
2610423003	**KMW-03**	Water	10/10/18 10:00	10/12/18 09:20
2610423004	**KMW-04**	Water	10/10/18 17:10	10/12/18 09:20
2610423005	**KMW-05**	Water	10/10/18 16:24	10/12/18 09:20
2610423006	**KMW-06**	Water	10/10/18 12:00	10/12/18 09:20
2610423007	**KMW-07**	Water	10/10/18 15:20	10/12/18 09:20
2610423008	**KMW-08**	Water	10/09/18 09:44	10/12/18 09:20
2610423009	**KMW-09**	Water	10/09/18 12:44	10/12/18 09:20
2610423010	**KMW-10**	Water	10/09/18 10:58	10/12/18 09:20
2610423011	**KMW-11**	Water	10/10/18 12:35	10/12/18 09:20
2610423012	**KMW-12**	Water	10/10/18 14:49	10/12/18 09:20
2610423013	**KMW-13**	Water	10/09/18 15:08	10/12/18 09:20
2610423014	**FBL 101018**	Water	10/10/18 07:52	10/12/18 09:20
2610423015	**EQBL 101018**	Water	10/10/18 08:00	10/12/18 09:20
2610423016	**Dup-1**	Water	10/09/18 00:00	10/12/18 09:20
2610423017	**Dup-2**	Water	10/09/18 00:00	10/12/18 09:20

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SAMPLE ANALYTE COUNT

Project: Plant Kraft Radium
Pace Project No.: 2610423

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2610423001	**KMW-01**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423002	**KMW-02**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423003	**KMW-03**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423004	**KMW-04**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423005	**KMW-05**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423006	**KMW-06**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423007	**KMW-07**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423008	**KMW-08**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423009	**KMW-09**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423010	**KMW-10**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423011	**KMW-11**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423012	**KMW-12**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423013	**KMW-13**	EPA 9315	LAL	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Plant Kraft Radium
Pace Project No.: 2610423

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423014	**FBL 101018**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423015	**EQBL 101018**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423016	**Dup-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2610423017	**Dup-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JLW	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-01 **Lab ID: 2610423001** Collected: 10/09/18 12:10 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.67 ± 0.683 (0.425) C:95% T:NA**	pCi/L	10/25/18 07:23	13982-63-3	
Radium-228	EPA 9320	**7.79 ± 1.65 (1.10) C:70% T:91%**	pCi/L	11/01/18 16:33	15262-20-1	
Total Radium	Total Radium Calculation	**10.5 ± 2.33 (1.53)**	pCi/L	11/05/18 15:53	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-02 **Lab ID: 2610423002** Collected: 10/09/18 16:03 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.640 ± 0.339 (0.512) C:86% T:NA**	pCi/L	10/25/18 07:23	13982-63-3	
Radium-228	EPA 9320	**0.969 ± 0.532 (0.983) C:70% T:90%**	pCi/L	11/01/18 16:33	15262-20-1	
Total Radium	Total Radium Calculation	**1.61 ± 0.871 (1.50)**	pCi/L	11/05/18 15:53	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-03 **Lab ID: 2610423003** Collected: 10/10/18 10:00 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.729 ± 0.323 (0.375) C:86% T:NA**	pCi/L	10/25/18 07:26	13982-63-3	
Radium-228	EPA 9320	**0.945 ± 0.530 (0.982) C:66% T:90%**	pCi/L	11/01/18 16:33	15262-20-1	
Total Radium	Total Radium Calculation	**1.67 ± 0.853 (1.36)**	pCi/L	11/06/18 13:15	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-04 **Lab ID: 2610423004** Collected: 10/10/18 17:10 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.533 ± 0.103 (0.0610) C:95% T:NA**	pCi/L	11/06/18 11:52	13982-63-3	
Radium-228	EPA 9320	**1.69 ± 0.596 (0.849) C:70% T:83%**	pCi/L	11/01/18 16:36	15262-20-1	
Total Radium	Total Radium Calculation	**2.22 ± 0.699 (0.910)**	pCi/L	11/09/18 12:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-05 **Lab ID: 2610423005** Collected: 10/10/18 16:24 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.970 ± 0.266 (0.168) C:97% T:NA**	pCi/L	11/06/18 16:19	13982-63-3	
Radium-228	EPA 9320	**5.00 ± 1.14 (0.895) C:70% T:92%**	pCi/L	11/01/18 16:36	15262-20-1	
Total Radium	Total Radium Calculation	**5.97 ± 1.41 (1.06)**	pCi/L	11/09/18 12:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-06 **Lab ID: 2610423006** Collected: 10/10/18 12:00 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**3.06 ± 0.724 (0.363) C:95% T:NA**	pCi/L	10/25/18 07:26	13982-63-3	
Radium-228	EPA 9320	**4.76 ± 1.10 (0.876) C:71% T:89%**	pCi/L	11/01/18 16:35	15262-20-1	
Total Radium	Total Radium Calculation	**7.82 ± 1.82 (1.24)**	pCi/L	11/06/18 13:15	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-07 **Lab ID: 2610423007** Collected: 10/10/18 15:20 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.16 ± 0.304 (0.232) C:99% T:NA**	pCi/L	11/07/18 08:23	13982-63-3	
Radium-228	EPA 9320	**5.86 ± 1.36 (1.20) C:67% T:82%**	pCi/L	11/01/18 16:33	15262-20-1	
Total Radium	Total Radium Calculation	**7.02 ± 1.66 (1.43)**	pCi/L	11/09/18 12:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-08 **Lab ID: 2610423008** Collected: 10/09/18 09:44 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.785 ± 0.369 (0.528) C:90% T:NA**	pCi/L	10/25/18 07:22	13982-63-3	
Radium-228	EPA 9320	**1.11 ± 0.547 (0.961) C:68% T:77%**	pCi/L	11/01/18 13:11	15262-20-1	
Total Radium	Total Radium Calculation	**1.90 ± 0.916 (1.49)**	pCi/L	11/05/18 15:53	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-09 **Lab ID: 2610423009** Collected: 10/09/18 12:44 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.60 ± 0.514 (0.457) C:83% T:NA**	pCi/L	10/25/18 07:23	13982-63-3	
Radium-228	EPA 9320	**-0.105 ± 0.502 (1.17) C:68% T:92%**	pCi/L	11/01/18 16:33	15262-20-1	
Total Radium	Total Radium Calculation	**1.60 ± 1.02 (1.63)**	pCi/L	11/05/18 15:53	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-10 **Lab ID: 2610423010** Collected: 10/09/18 10:58 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.705 ± 0.323 (0.380) C:90% T:NA**	pCi/L	10/25/18 07:23	13982-63-3	
Radium-228	EPA 9320	**0.427 ± 0.430 (0.892) C:71% T:87%**	pCi/L	11/01/18 16:35	15262-20-1	
Total Radium	Total Radium Calculation	**1.13 ± 0.753 (1.27)**	pCi/L	11/05/18 15:53	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-11 **Lab ID: 2610423011** Collected: 10/10/18 12:35 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.07 ± 0.287 (0.174) C:90% T:NA**	pCi/L	11/07/18 08:23	13982-63-3	
Radium-228	EPA 9320	**0.467 ± 0.445 (0.914) C:69% T:83%**	pCi/L	11/01/18 16:35	15262-20-1	
Total Radium	Total Radium Calculation	**1.54 ± 0.732 (1.09)**	pCi/L	11/09/18 12:09	7440-14-4	

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-12 **Lab ID: 2610423012** Collected: 10/10/18 14:49 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.68 ± 0.377 (0.180) C:93% T:NA**	pCi/L	11/07/18 08:22	13982-63-3	
Radium-228	EPA 9320	**2.11 ± 0.640 (0.811) C:71% T:92%**	pCi/L	11/01/18 16:36	15262-20-1	
Total Radium	Total Radium Calculation	**3.79 ± 1.02 (0.991)**	pCi/L	11/09/18 12:09	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: KMW-13 **Lab ID: 2610423013** Collected: 10/09/18 15:08 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.47 ± 0.455 (0.344) C:92% T:NA**	pCi/L	10/25/18 07:23	13982-63-3	
Radium-228	EPA 9320	**1.03 ± 0.551 (0.987) C:58% T:88%**	pCi/L	11/01/18 16:36	15262-20-1	
Total Radium	Total Radium Calculation	**2.50 ± 1.01 (1.33)**	pCi/L	11/05/18 15:53	7440-14-4	

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(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: FBL 101018 **Lab ID: 2610423014** Collected: 10/10/18 07:52 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0754 ± 0.160 (0.376) C:93% T:NA**	pCi/L	10/25/18 07:24	13982-63-3	
Radium-228	EPA 9320	**1.79 ± 0.689 (1.05) C:65% T:75%**	pCi/L	11/01/18 16:36	15262-20-1	
Total Radium	Total Radium Calculation	**1.87 ± 0.849 (1.43)**	pCi/L	11/06/18 13:15	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: EQBL 101018 **Lab ID: 2610423015** Collected: 10/10/18 08:00 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.314 ± 0.239 (0.429) C:94% T:NA**	pCi/L	10/25/18 07:25	13982-63-3	
Radium-228	EPA 9320	**0.923 ± 0.531 (0.986) C:70% T:81%**	pCi/L	11/01/18 16:35	15262-20-1	
Total Radium	Total Radium Calculation	**1.24 ± 0.770 (1.42)**	pCi/L	11/06/18 13:15	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: Dup-1 **Lab ID: 2610423016** Collected: 10/09/18 00:00 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**2.46 ± 0.622 (0.329) C:94% T:NA**	pCi/L	10/25/18 08:03	13982-63-3	
Radium-228	EPA 9320	**7.50 ± 1.56 (0.807) C:73% T:84%**	pCi/L	11/01/18 13:11	15262-20-1	
Total Radium	Total Radium Calculation	**9.96 ± 2.18 (1.14)**	pCi/L	11/05/18 15:53	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

Sample: Dup-2 **Lab ID: 2610423017** Collected: 10/09/18 00:00 Received: 10/12/18 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.797 ± 0.334 (0.324) C:87% T:NA**	pCi/L	10/25/18 07:22	13982-63-3	
Radium-228	EPA 9320	**0.631 ± 0.434 (0.843) C:71% T:85%**	pCi/L	11/01/18 13:11	15262-20-1	
Total Radium	Total Radium Calculation	**1.43 ± 0.768 (1.17)**	pCi/L	11/05/18 15:53	7440-14-4	

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(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

QC Batch: 317136 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2610423001, 2610423002, 2610423003, 2610423004, 2610423005, 2610423006, 2610423007, 2610423008, 2610423009, 2610423010, 2610423011, 2610423012, 2610423013, 2610423014, 2610423015, 2610423016, 2610423017

METHOD BLANK: 1547228 Matrix: Water
Associated Lab Samples: 2610423001, 2610423002, 2610423003, 2610423004, 2610423005, 2610423006, 2610423007, 2610423008, 2610423009, 2610423010, 2610423011, 2610423012, 2610423013, 2610423014, 2610423015, 2610423016, 2610423017

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.627 ± 0.345 (0.623) C:80% T:92%	pCi/L	11/01/18 13:12	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

QC Batch: 317859 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2610423004, 2610423005, 2610423007, 2610423011, 2610423012

METHOD BLANK: 1550523 Matrix: Water
Associated Lab Samples: 2610423004, 2610423005, 2610423007, 2610423011, 2610423012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.113 ± 0.0985 (0.175) C:98% T:NA	pCi/L	11/06/18 08:10	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft Radium
Pace Project No.: 2610423

QC Batch: 317135 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2610423001, 2610423002, 2610423003, 2610423006, 2610423008, 2610423009, 2610423010, 2610423013, 2610423014, 2610423015, 2610423016, 2610423017

METHOD BLANK: 1547224 Matrix: Water
Associated Lab Samples: 2610423001, 2610423002, 2610423003, 2610423006, 2610423008, 2610423009, 2610423010, 2610423013, 2610423014, 2610423015, 2610423016, 2610423017

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0781 ± 0.155 (0.358) C:99% T:NA	pCi/L	10/25/18 08:03	

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REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Kraft Radium
Pace Project No.: 2610423

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

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Peachtree Corners, GA 30092
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft Radium
Pace Project No.: 2610423

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2610423001	KMW-01	EPA 9315	317135		
2610423002	KMW-02	EPA 9315	317135		
2610423003	KMW-03	EPA 9315	317135		
2610423004	KMW-04	EPA 9315	317859		
2610423005	KMW-05	EPA 9315	317859		
2610423006	KMW-06	EPA 9315	317135		
2610423007	KMW-07	EPA 9315	317859		
2610423008	KMW-08	EPA 9315	317135		
2610423009	KMW-09	EPA 9315	317135		
2610423010	KMW-10	EPA 9315	317135		
2610423011	KMW-11	EPA 9315	317859		
2610423012	KMW-12	EPA 9315	317859		
2610423013	KMW-13	EPA 9315	317135		
2610423014	FBL 101018	EPA 9315	317135		
2610423015	EQBL 101018	EPA 9315	317135		
2610423016	Dup-1	EPA 9315	317135		
2610423017	Dup-2	EPA 9315	317135		
2610423001	KMW-01	EPA 9320	317136		
2610423002	KMW-02	EPA 9320	317136		
2610423003	KMW-03	EPA 9320	317136		
2610423004	KMW-04	EPA 9320	317136		
2610423005	KMW-05	EPA 9320	317136		
2610423006	KMW-06	EPA 9320	317136		
2610423007	KMW-07	EPA 9320	317136		
2610423008	KMW-08	EPA 9320	317136		
2610423009	KMW-09	EPA 9320	317136		
2610423010	KMW-10	EPA 9320	317136		
2610423011	KMW-11	EPA 9320	317136		
2610423012	KMW-12	EPA 9320	317136		
2610423013	KMW-13	EPA 9320	317136		
2610423014	FBL 101018	EPA 9320	317136		
2610423015	EQBL 101018	EPA 9320	317136		
2610423016	Dup-1	EPA 9320	317136		
2610423017	Dup-2	EPA 9320	317136		
2610423001	KMW-01	Total Radium Calculation	319269		
2610423002	KMW-02	Total Radium Calculation	319269		
2610423003	KMW-03	Total Radium Calculation	319413		
2610423004	KMW-04	Total Radium Calculation	319916		
2610423005	KMW-05	Total Radium Calculation	319916		
2610423006	KMW-06	Total Radium Calculation	319413		
2610423007	KMW-07	Total Radium Calculation	319916		
2610423008	KMW-08	Total Radium Calculation	319269		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft Radium
Pace Project No.: 2610423

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2610423009	**KMW-09**	Total Radium Calculation	319269		
2610423010	**KMW-10**	Total Radium Calculation	319269		
2610423011	**KMW-11**	Total Radium Calculation	319916		
2610423012	**KMW-12**	Total Radium Calculation	319916		
2610423013	**KMW-13**	Total Radium Calculation	319269		
2610423014	**FBL 101018**	Total Radium Calculation	319413		
2610423015	**EQBL 101018**	Total Radium Calculation	319413		
2610423016	**Dup-1**	Total Radium Calculation	319269		
2610423017	**Dup-2**	Total Radium Calculation	319269		

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CHAIN OF CUSTODY RECORD

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Pace Analytical Services, LLC - Atlanta GA
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 2

CLIENT NAME: Georgia Power

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd
Atlanta, Ga
30308

REPORT TO: Christina Coleman
CC: Stephen Wilson, Trent Godwin
REQUESTED COMPLETION DATE:
PO #:

PROJECT NAME/STATE: Kraft Radium Sampling October 2018 /GA
PROJECT #:

ANALYSIS REQUESTED

CONTAINER TYPE: P
PRESERVATION: HNO3

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Radium 226/228 9315 & 9320 & SW 8465	LAB ID NUMBER
10/9/18	1210	GW		✓	KMW-01	2	X	
10/9/18	1603	GW		✓	KMW-02	2	X	
10/10/18	1000	GW		✓	KMW-03	2	X	
10/10/18	1710	GW		✓	KMW-04	2	X	
10/10/18	1624	GW		✓	KMW-05	2	X	
10/10/18	1200	GW		✓	KMW-06	2	X	
10/10/18	1520	GW		✓	KMW-07	2	X	
10/9/18	0944	GW		✓	KMW-08	2	X	
10/9/18	1244	GW		✓	KMW-09	2	X	
10/9/18	1058	GW		✓	KMW-10	2	X	
10/10/18	1235	GW		✓	KMW-11	2	X	
10/10/18	1449	GW		✓	KMW-12	2	X	

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤6°C; 7 - ≤6°C not frozen

*MATRIX CODES:
DW - DRINKING WATER; WW - WASTEWATER; GW - GROUNDWATER; SW - SURFACE WATER; ST - STORM WATER; W - WATER; S - SOIL; SL - SLUDGE; SD - SOLID; A - AIR; L - LIQUID; P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

WO#: 2610423
2610423

SAMPLED BY AND TITLE: Kevin Stephenson & Veronica Fay
DATE/TIME: 10/11/18 / 1400

RECEIVED BY: FedEx
DATE/TIME: 10/11/18 / 1437

RELINQUISHED BY: Veronica Fay
DATE/TIME: 10/11/18 / 1437

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: Malman
DATE/TIME: 10/12/18 0920

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: 2.3.5 Max:
Custody Seal: Intact Broken Not Present N/A
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

Rev. 12/15/2016

CHAIN OF CUSTODY RECORD

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(770) 734-4200 : FAX (770) 734-4201

CLIENT NAME: Georgia Power

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd, Atlanta Ga 30308

REPORT TO: Christina Coleman

CC: Stephen Wilson, Trent Godwin

REQUESTED COMPLETION DATE:

PO #:

PROJECT NAME/STATE: Kraft Radium Sampling October 2018 / GA

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Radium 226/228 9315 & 9320 & SW 8465									LAB ID NUMBER
CONTAINER TYPE:							P									
PRESERVATION:							HNO3									
10/9/18	1508	GW		✓	KMW-13	2	X									
10/10/18	0752	GW		✓	FBL 101018	2	X									
10/10/18	0800	GW		✓	EQBL101018	2	X									
10/9/18	—	GW		✓	DUP-1	2	X									
10/9/18	—	GW		✓	DUP-2	2	X									

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_4, ≤6°C
G - CLEAR GLASS	3 - HNO_3
V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	6 - $Na_2S_2O_3$, ≤6°C
	7 - ≤6°C not frozen

*MATRIX CODES:

DW - DRINKING WATER	S - SOIL
WW - WASTEWATER	SL - SLUDGE
GW - GROUNDWATER	SD - SOLID
SW - SURFACE WATER	A - AIR
~~ST - STORM WATER~~	L - LIQUID
W - WATER	P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

WO#: 2610423

PM: BM Due Date: 11/09/18

CLIENT: GAPower-CCR

SAMPLED BY AND TITLE: Kevin Stephenson & Veronica Fay

DATE/TIME: 10/11/18 / 1400

RELINQUISHED BY: Veronica Fay

DATE/TIME: 10/11/18 / 1437

RECEIVED BY: FedEx

DATE/TIME: 10/11/18 / 1437

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB: M Zalman

DATE/TIME: 10/12/18 0920

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes No NA

Temperature: Min: 2.3.5 Max:

Custody Seal: Intact Broken Not Present N/A

# of Coolers

Cooler ID:

FOR LAB USE ONLY

LAB #:

Entered into LIMS:

Tracking #:

Sample Condition Upon Receipt

Pace Analytical

Client Name: GAPower Project #

WO#: 2610423

PM: BM Due Date: 11/09/18

CLIENT: GAPower-CCR

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 783204663225

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used 83 Type of Ice: Wet Blue (None) ☐ Samples on ice, cooling process has begun

Cooler Temperature 23.5 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 10/12/18 MR

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: GW		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-161490-1
Client Project/Site: Kraft

For:
Resolute Env & Water Res Consulting LLC
1001 Weatherstone Parkway
Suite 410
Woodstock, Georgia 30188

Attn: Robert Mull

Authorized for release by:
12/4/2018 5:08:05 PM

Keaton Conner, Project Manager I
(813)885-7427
keaton.conner@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

Client: Resolute Env & Water Res Consulting LLC
Project/Site: Kraft

TestAmerica Job ID: 680-161490-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Resolute Env & Water Res Consulting LLC
Project/Site: Kraft

TestAmerica Job ID: 680-161490-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-161490-1	DCS-67A-1	Solid	12/03/18 12:33	12/03/18 16:26
680-161490-2	DCS-67A-2	Solid	12/03/18 12:39	12/03/18 16:26
680-161490-5	DCS-67B	Solid	12/03/18 14:21	12/03/18 16:26
680-161490-6	DCS-67A-N3-2	Solid	12/03/18 14:33	12/03/18 16:26
680-161490-7	DCS-67A-W3-2	Solid	12/03/18 14:36	12/03/18 16:26
680-161490-8	DCS-67A-S3-2	Solid	12/03/18 14:40	12/03/18 16:26
680-161490-9	DCS-67A-E3-2	Solid	12/03/18 14:46	12/03/18 16:26

Job ID: 680-161490-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Resolute Env & Water Res Consulting LLC
Project: Kraft

Report Number: 680-161490-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 12/3/2018 4:26 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

METALS (ICP)

Samples DCS-67A-1 (680-161490-1), DCS-67A-2 (680-161490-2), DCS-67B (680-161490-5), DCS-67A-N3-2 (680-161490-6), DCS-67A-W3-2 (680-161490-7), DCS-67A-S3-2 (680-161490-8), and DCS-67A-E3-2 (680-161490-9) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared and analyzed on 12/04/2018.

Arsenic recovered outside of criteria high for the MSD of sample DCS-67A-1 (680-161490-1) in batch 680-550050.

PERCENT SOLIDS/MOISTURE

Samples DCS-67A-1 (680-161490-1), DCS-67A-2 (680-161490-2), DCS-67B (680-161490-5), DCS-67A-N3-2 (680-161490-6), DCS-67A-W3-2 (680-161490-7), DCS-67A-S3-2 (680-161490-8) and DCS-67A-E3-2 (680-161490-9) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 12/04/2018.

Client Sample ID: DCS-67A-1
Lab Sample ID: 680-161490-1
Date Collected: 12/03/18 12:33
Matrix: Solid
Date Received: 12/03/18 16:26
Percent Solids: 83.0

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.6	F1	2.0	0.82	mg/Kg	☼	12/04/18 07:47	12/04/18 11:33	1

Client Sample ID: DCS-67A-2
Lab Sample ID: 680-161490-2
Date Collected: 12/03/18 12:39
Matrix: Solid
Date Received: 12/03/18 16:26
Percent Solids: 87.0

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6	J	2.0	0.81	mg/Kg	☼	12/04/18 07:47	12/04/18 11:56	1

Client Sample ID: DCS-67B
Lab Sample ID: 680-161490-5
Date Collected: 12/03/18 14:21
Matrix: Solid
Date Received: 12/03/18 16:26
Percent Solids: 87.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.3		2.0	0.80	mg/Kg	☼	12/04/18 07:47	12/04/18 12:19	1

Client Sample ID: DCS-67A-N3-2
Lab Sample ID: 680-161490-6
Date Collected: 12/03/18 14:33
Matrix: Solid
Date Received: 12/03/18 16:26
Percent Solids: 87.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.3		2.0	0.80	mg/Kg	☼	12/04/18 07:47	12/04/18 12:23	1

Client Sample ID: DCS-67A-W3-2
Lab Sample ID: 680-161490-7
Date Collected: 12/03/18 14:36
Matrix: Solid
Date Received: 12/03/18 16:26
Percent Solids: 87.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.85	J	1.9	0.77	mg/Kg	☼	12/04/18 07:47	12/04/18 12:28	1

Client Sample ID: DCS-67A-S3-2
Lab Sample ID: 680-161490-8
Date Collected: 12/03/18 14:40
Matrix: Solid
Date Received: 12/03/18 16:26
Percent Solids: 89.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<2.0		2.0	0.80	mg/Kg	☼	12/04/18 07:47	12/04/18 12:32	1

Client Sample ID: DCS-67A-E3-2
Lab Sample ID: 680-161490-9
Date Collected: 12/03/18 14:46
Matrix: Solid
Date Received: 12/03/18 16:26
Percent Solids: 88.9

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.8		1.9	0.76	mg/Kg	☼	12/04/18 07:47	12/04/18 12:37	1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-549976/1-A
Matrix: Solid
Analysis Batch: 550050

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549976

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<2.0		2.0	0.78	mg/Kg		12/04/18 07:47	12/04/18 11:24	1

Lab Sample ID: LCS 680-549976/2-A
Matrix: Solid
Analysis Batch: 550050

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549976

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			9.35	8.82		mg/Kg		94	80 - 120		

Lab Sample ID: 680-161490-1 MS
Matrix: Solid
Analysis Batch: 550050

Client Sample ID: DCS-67A-1
Prep Type: Total/NA
Prep Batch: 549976

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	8.6	F1	10.3	20.8		mg/Kg	☼	118	75 - 125		

Lab Sample ID: 680-161490-1 MSD
Matrix: Solid
Analysis Batch: 550050

Client Sample ID: DCS-67A-1
Prep Type: Total/NA
Prep Batch: 549976

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	8.6	F1	10.4	22.9	F1	mg/Kg	☼	137	75 - 125	10	20

QC Association Summary

Client: Resolute Env & Water Res Consulting LLC
Project/Site: Kraft

TestAmerica Job ID: 680-161490-1

Metals

Prep Batch: 549976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-161490-1	DCS-67A-1	Total/NA	Solid	3050B	
680-161490-2	DCS-67A-2	Total/NA	Solid	3050B	
680-161490-5	DCS-67B	Total/NA	Solid	3050B	
680-161490-6	DCS-67A-N3-2	Total/NA	Solid	3050B	
680-161490-7	DCS-67A-W3-2	Total/NA	Solid	3050B	
680-161490-8	DCS-67A-S3-2	Total/NA	Solid	3050B	
680-161490-9	DCS-67A-E3-2	Total/NA	Solid	3050B	

Analysis Batch: 550050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-161490-1	DCS-67A-1	Total/NA	Solid	6010C	549976
680-161490-2	DCS-67A-2	Total/NA	Solid	6010C	549976
680-161490-5	DCS-67B	Total/NA	Solid	6010C	549976
680-161490-6	DCS-67A-N3-2	Total/NA	Solid	6010C	549976
680-161490-7	DCS-67A-W3-2	Total/NA	Solid	6010C	549976
680-161490-8	DCS-67A-S3-2	Total/NA	Solid	6010C	549976
680-161490-9	DCS-67A-E3-2	Total/NA	Solid	6010C	549976

General Chemistry

Analysis Batch: 550014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-161490-1	DCS-67A-1	Total/NA	Solid	Moisture	
680-161490-2	DCS-67A-2	Total/NA	Solid	Moisture	
680-161490-5	DCS-67B	Total/NA	Solid	Moisture	
680-161490-6	DCS-67A-N3-2	Total/NA	Solid	Moisture	
680-161490-7	DCS-67A-W3-2	Total/NA	Solid	Moisture	
680-161490-8	DCS-67A-S3-2	Total/NA	Solid	Moisture	
680-161490-9	DCS-67A-E3-2	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Resolute Env & Water Res Consulting LLC
Project/Site: Kraft

TestAmerica Job ID: 680-161490-1

Client Sample ID: DCS-67A-1
Date Collected: 12/03/18 12:33
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			550014	12/04/18 12:11	EHS	TAL SAV
	Instrument ID: NOEQUIP									

Client Sample ID: DCS-67A-1
Date Collected: 12/03/18 12:33
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-1
Matrix: Solid
Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.18 g	100 mL	549976	12/04/18 07:47	CDD	TAL SAV
Total/NA	Analysis	6010C		1			550050	12/04/18 11:33	BWR	TAL SAV
	Instrument ID: ICPE									

Client Sample ID: DCS-67A-2
Date Collected: 12/03/18 12:39
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			550014	12/04/18 12:11	EHS	TAL SAV
	Instrument ID: NOEQUIP									

Client Sample ID: DCS-67A-2
Date Collected: 12/03/18 12:39
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-2
Matrix: Solid
Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.14 g	100 mL	549976	12/04/18 07:47	CDD	TAL SAV
Total/NA	Analysis	6010C		1			550050	12/04/18 11:56	BWR	TAL SAV
	Instrument ID: ICPE									

Client Sample ID: DCS-67B
Date Collected: 12/03/18 14:21
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			550014	12/04/18 12:11	EHS	TAL SAV
	Instrument ID: NOEQUIP									

Client Sample ID: DCS-67B
Date Collected: 12/03/18 14:21
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-5
Matrix: Solid
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.14 g	100 mL	549976	12/04/18 07:47	CDD	TAL SAV

Lab Chronicle

Client: Resolute Env & Water Res Consulting LLC
Project/Site: Kraft

TestAmerica Job ID: 680-161490-1

Client Sample ID: DCS-67B
Date Collected: 12/03/18 14:21
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-5
Matrix: Solid
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1			550050	12/04/18 12:19	BWR	TAL SAV
	Instrument ID: ICPE									

Client Sample ID: DCS-67A-N3-2
Date Collected: 12/03/18 14:33
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			550014	12/04/18 12:11	EHS	TAL SAV
	Instrument ID: NOEQUIP									

Client Sample ID: DCS-67A-N3-2
Date Collected: 12/03/18 14:33
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-6
Matrix: Solid
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.14 g	100 mL	549976	12/04/18 07:47	CDD	TAL SAV
Total/NA	Analysis	6010C		1			550050	12/04/18 12:23	BWR	TAL SAV
	Instrument ID: ICPE									

Client Sample ID: DCS-67A-W3-2
Date Collected: 12/03/18 14:36
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			550014	12/04/18 12:11	EHS	TAL SAV
	Instrument ID: NOEQUIP									

Client Sample ID: DCS-67A-W3-2
Date Collected: 12/03/18 14:36
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-7
Matrix: Solid
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.19 g	100 mL	549976	12/04/18 07:47	CDD	TAL SAV
Total/NA	Analysis	6010C		1			550050	12/04/18 12:28	BWR	TAL SAV
	Instrument ID: ICPE									

Client Sample ID: DCS-67A-S3-2
Date Collected: 12/03/18 14:40
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			550014	12/04/18 12:11	EHS	TAL SAV

Lab Chronicle

Client: Resolute Env & Water Res Consulting LLC
Project/Site: Kraft

TestAmerica Job ID: 680-161490-1

Client Sample ID: DCS-67A-S3-2
Date Collected: 12/03/18 14:40
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			550014	12/04/18 12:11	EHS	TAL SAV
	Instrument ID: NOEQUIP									

Client Sample ID: DCS-67A-S3-2
Date Collected: 12/03/18 14:40
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-8
Matrix: Solid
Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.12 g	100 mL	549976	12/04/18 07:47	CDD	TAL SAV
Total/NA	Analysis	6010C		1			550050	12/04/18 12:32	BWR	TAL SAV
	Instrument ID: ICPE									

Client Sample ID: DCS-67A-E3-2
Date Collected: 12/03/18 14:46
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			550014	12/04/18 12:11	EHS	TAL SAV
	Instrument ID: NOEQUIP									

Client Sample ID: DCS-67A-E3-2
Date Collected: 12/03/18 14:46
Date Received: 12/03/18 16:26

Lab Sample ID: 680-161490-9
Matrix: Solid
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.18 g	100 mL	549976	12/04/18 07:47	CDD	TAL SAV
Total/NA	Analysis	6010C		1			550050	12/04/18 12:37	BWR	TAL SAV
	Instrument ID: ICPE									

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Resolute Env & Water Res Consulting LLC
TestAmerica Job ID: 680-161490-1
Project/Site: Kraft

Laboratory: TestAmerica Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	41450	06-30-19
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-19
Colorado	State Program	8	N/A	12-31-18 *
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Georgia	State Program	4	803	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18 *
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18 *
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
Louisiana (DW)	NELAP	6	LA160019	12-31-18 *
Maine	State Program	1	GA00006	09-25-20
Maryland	State Program	3	250	12-31-18 *
Massachusetts	State Program	1	M-GA006	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	06-30-19
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18 *
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18 *
South Carolina	State Program	4	98001	06-30-18 *
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18 *
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18 *
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Resolute Env & Water Res Consulting LLC
Project/Site: Kraft

TestAmerica Job ID: 680-161490-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV
3050B	Preparation, Metals	SW846	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: _____

Date: 12/3/18 Page 1 of 2

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd SE Bin 8F Atlanta, GA 30308
PHONE: 678-548-9415	EMAIL: Kevin.Stephenson@resolveenv.com
SAMPLED BY: Kevin Stephenson / Robert Mull	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: Arsenic EPA 6020	PRESERVATION (see codes)	REMARKS	Number of Containers
1	DLS-67A-1	12/3/18	1233	X		SO				1
2	DLS-67A-2	12/3/18	1239	X		SO				1
3	DLS-67A-3	12/3/18	1243	X		SO			HOLD	1
4	DLS-67A-4	12/3/18	1247	X		SO			HOLD	1
5	DLS-67B	12/3/18	1421	X		SO				1
6	DLS-67A-N3-2	12/3/18	1433	X		SO				1
7	DLS-67A-W3-2	12/3/18	1436	X		SO				1
8	DLS-67A-S3-2	12/3/18	1440	X		SO				1
9	DLS-67A-E3-2	12/3/18	1446	X		SO				1
10	DLS-67A-N1-1	12/3/18	1252	X		SO			Analyze & HOLD	1
11	DLS-67A-N1-2	12/3/18	1257	X		SO			HOLD	1
12	DLS-67A-N2-2	12/3/18	1305	X		SO			HOLD	1
13	DLS-67A-N2-1	12/3/18	1301	X		SO			HOLD	1
14	DLS-67A-W1-1	12/3/18	1309	X		SO			Analyze & HOLD	1

680-161490 Chain of Custody

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Robert Mull	12/3/18 1624	1. VTA	12-3-18 1624
2.		2.	
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS: 1-7
Christina Coleman
Kevin Stephenson
Trent.Godwin@ResolveEnv.com
Stephen.Wilson@ResolveEnv.com

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: Plant Kraft
PROJECT #:
SITE ADDRESS: 255 Cresapdale Road, Ft Washington
SEND REPORT TO: See Comments
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 14

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☑ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

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ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: _____

Date: 12/3/18 Page 2 of 2

COMPANY:	ADDRESS:
Georgia Power Company	241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308
PHONE: 706-266-0551	EMAIL: Robert.Mull@ResoluteEnv.com
SAMPLED BY: Robert Mull / Kevin Stephenson	SIGNATURE: Robert B Mull

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	ANALYSIS REQUESTED: Arsenic EPA 6020	PRESERVATION (see codes)	REMARKS	Number of Containers
1	DCS-67A-W1-2	12/3/18	1318	X		SO			HOLD	1
2	DCS-67A-W2-1	12/3/18	1322	X		SO			HOLD	1
3	DCS-67A-W2-2	12/3/18	1329	X		SO			HOLD	1
4	DCS-67A-S1-1	12/3/18	1333	X		SO			Analyze + HOLD	1
5	DCS-67A-S1-2	12/3/18	1340	X		SO			HOLD	1
6	DCS-67A-S2-1	12/3/18	1344	X		SO			HOLD	1
7	DCS-67A-S2-2	12/3/18	1348	X		SO			HOLD	1
8	DCS-67A-E1-1	12/3/18	1352	X		SO			Analyze + HOLD	1
9	DCS-67A-E1-2	12/3/18	1356	X		SO			HOLD	1
10	DCS-67A-E2-2	12/3/18	1402	X		SO			HOLD	1
11	DCS-67A-E2-1	12/3/18	1359	X		SO			HOLD	1
12										
13										
14										

Loc: 680
161490

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. Robert B Mull	12/3/18 1624	1. [signature] TA	12-3-18 1624
2.		2.	
3.		3.	

PROJECT INFORMATION
PROJECT NAME: Plant Kraft
PROJECT #:
SITE ADDRESS: 755 Crossgate Road, Port Wentworth
SEND REPORT TO: SEE Comments
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 11

Turnaround Time (TAT) Request
- ☐ Standard 5 Business Days
- ☐ 2 Business Day Rush
- ☐ Next Business Day Rush
- ☑ Same-Day Rush (auth req.)
- ☐ Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

SPECIAL INSTRUCTIONS/COMMENTS: 1.7
Christina Coleman
Kevin Stephenson
Trent.Godwin@ResoluteEnv.com
Stephen.Wilson@ResoluteEnv.com

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water WW = Waste Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

Preservative Codes: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

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12/4/2018

Login Sample Receipt Checklist

Client: Resolute Env & Water Res Consulting LLC

Job Number: 680-161490-1

Login Number: 161490
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

August 23, 2019

Resolute Environmental & Water Resources

Sample Delivery Group:	L1128644
Samples Received:	08/14/2019
Project Number:	
Description:	Plant Kraft

Report To:

Audrey Crafton
1003 Weatherstone Parkway
Suite 320
Woodstock, GA 30188

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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NAPCS-1-5-6 L1128644-01 Solid

Collected by: Audrey Crafton | Collected date/time: 08/12/19 13:50 | Received date/time: 08/14/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1331622	1	08/21/19 07:17	08/21/19 07:25	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1330017	1	08/17/19 13:07	08/20/19 09:30	TRB	Mt. Juliet, TN

NAPCS-2-5-6 L1128644-02 Solid

Collected by: Audrey Crafton | Collected date/time: 08/12/19 15:30 | Received date/time: 08/14/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1331622	1	08/21/19 07:17	08/21/19 07:25	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1330017	1	08/17/19 13:07	08/20/19 09:33	TRB	Mt. Juliet, TN

NAPCS-3-5-6 L1128644-03 Solid

Collected by: Audrey Crafton | Collected date/time: 08/12/19 16:00 | Received date/time: 08/14/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1331622	1	08/21/19 07:17	08/21/19 07:25	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1330017	1	08/17/19 13:07	08/20/19 09:41	TRB	Mt. Juliet, TN

ESCS-1-5-6 L1128644-04 Solid

Collected by: Audrey Crafton | Collected date/time: 08/13/19 10:20 | Received date/time: 08/14/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1331622	1	08/21/19 07:17	08/21/19 07:25	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1330017	1	08/17/19 13:07	08/20/19 09:43	TRB	Mt. Juliet, TN

ESCS-3-5-6 L1128644-05 Solid

Collected by: Audrey Crafton | Collected date/time: 08/13/19 09:10 | Received date/time: 08/14/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1331622	1	08/21/19 07:17	08/21/19 07:25	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1330017	1	08/17/19 13:07	08/20/19 09:46	TRB	Mt. Juliet, TN

ESCS-4-5-6 L1128644-06 Solid

Collected by: Audrey Crafton | Collected date/time: 08/13/19 09:38 | Received date/time: 08/14/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1331622	1	08/21/19 07:17	08/21/19 07:25	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1330017	1	08/17/19 13:07	08/20/19 09:49	TRB	Mt. Juliet, TN

ESCS-5-0-1 L1128644-07 Solid

Collected by: Audrey Crafton | Collected date/time: 08/13/19 11:30 | Received date/time: 08/14/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1331622	1	08/21/19 07:17	08/21/19 07:25	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1330017	1	08/17/19 13:07	08/20/19 09:51	TRB	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.8		1	08/21/2019 07:25	WG1331622

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.48	1	08/20/2019 09:30	WG1330017
Barium	15.8		0.619	1	08/20/2019 09:30	WG1330017

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.4		1	08/21/2019 07:25	WG1331622

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.49	1	08/20/2019 09:33	WG1330017
Barium	20.4		0.622	1	08/20/2019 09:33	WG1330017

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.4		1	08/21/2019 07:25	WG1331622

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.73	1	08/20/2019 09:41	WG1330017
Barium	33.0		0.682	1	08/20/2019 09:41	WG1330017

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.0		1	08/21/2019 07:25	WG1331622

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.44	1	08/20/2019 09:43	WG1330017
Barium	32.0		0.610	1	08/20/2019 09:43	WG1330017

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.0		1	08/21/2019 07:25	WG1331622

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.44	1	08/20/2019 09:46	WG1330017
Barium	20.4		0.610	1	08/20/2019 09:46	WG1330017

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.5		1	08/21/2019 07:25	WG1331622

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.31	1	08/20/2019 09:49	WG1330017
Barium	18.8		0.578	1	08/20/2019 09:49	WG1330017

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.1		1	08/21/2019 07:25	WG1331622

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	5.71		2.56	1	08/20/2019 09:51	WG1330017
Barium	106		0.640	1	08/20/2019 09:51	WG1330017

Method Blank (MB)

(MB) R3442721-1 08/21/19 07:25

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1128644-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1128644-01 08/21/19 07:25 • (DUP) R3442721-3 08/21/19 07:25

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	80.8	81.3	1	0.671		10

Laboratory Control Sample (LCS)

(LCS) R3442721-2 08/21/19 07:25

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3442116-1 08/20/19 09:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3442116-2 08/20/19 09:12 • (LCSD) R3442116-3 08/20/19 09:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	100	98.9	101	98.9	101	80.0-120			1.98	20
Barium	100	103	105	103	105	80.0-120			1.35	20

L1128785-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1128785-01 08/20/19 09:17 • (MS) R3442116-6 08/20/19 09:25 • (MSD) R3442116-7 08/20/19 09:27

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	6.27	106	99.1	100	92.8	1	75.0-125			7.06	20
Barium	100	303	368	364	65.4	61.5	1	75.0-125	J6	J6	1.08	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

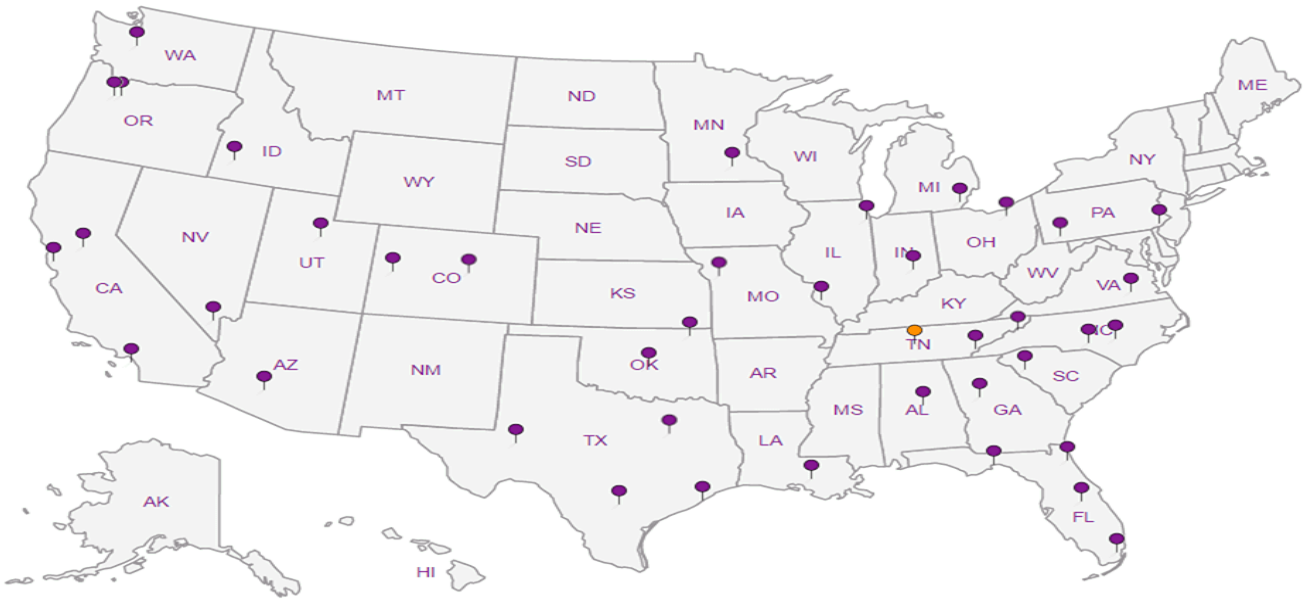
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Resolute Environmental & Water Resources

1003 Weatherstone Parkway

Billing Information:
Brian Steele
1003 Weatherstone Pkwy., Ste. 320
Woodstock, GA 30188

Report to: **Audrey Crafton**

Email To: **Audrey.Crafton@resoluteenv.com**

Project Description: **Plant Kraft**

City/State Collected: Port Wentworth Georgia

Phone: **404-358-8469**
Fax:

Client Project #

Lab Project # **RESENVWGA-KRAFT**

Collected by (print): Audrey Crafton

Site/Facility ID #

P.O. #

Collected by (signature): Audrey Crafton

Immediately Packed on Ice N___ Y___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Pres Chk:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ASICP,BAICP, TS 4ozClr-NoPres									Remarks	Sample # (lab only)
NAPCS-1-5-6	G	SS		8/12/19	1350	1	X										-1
NAPCS-2-5-6	G	SS		8/12/19	1530	1	X										-2
NAPCS-3-5-6	G	SS		8/12/19	1600	1	X										-3
ESCS-1-5-6	G	SS		8/13/19	1020	1	X										-4
ESCS-3-5-6	G	SS		8/13/19	0910	1	X										-5
ESCS-4-5-6	G	SS		8/13/19	0938	1	X										-6
ESCS-5-0-1	G	SS		8/13/19	1130	1	X										-7
		SS															
		SS															
		SS															

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1128644

B087

Acctnum: **RESENVWGA**
Template: **T153839**
Prelogin: **P722329**
TSR: **526 - Chris McCord**
PB: TB 8-2-19
Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: No rush

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Audrey Crafton	8/13/19	1300	FedEx
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Harley Mill

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: A3BF °C 3.7+.2=3.9

Bottles Received: 7

Date: 8/14/19 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

September 20, 2019

Lea Millet
Resolute Environmental & Water Resources

,

RE: Project: Plant Kraft
Pace Project No.: 2623133

Dear Lea Millet:
Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nikita Kuruganty
nikita.kuruganty@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Trent Godwin, Resolute Environmental & Water Resources
Rebecca Thornton, Pace Analytical Atlanta
Stephen Wilson, Resolute Environmental & Water Resources

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Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Kraft
Pace Project No.: 2623133

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

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SAMPLE SUMMARY

Project: Plant Kraft
Pace Project No.: 2623133

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623133001	**WAPCS-1**	Solid	09/13/19 10:00	09/13/19 16:14
2623133002	**WAPCS-2**	Solid	09/13/19 09:00	09/13/19 16:14
2623133003	**WAPCS-3**	Solid	09/12/19 17:30	09/13/19 16:14

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SAMPLE ANALYTE COUNT

Project: Plant Kraft
Pace Project No.: 2623133

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2623133001	**WAPCS-1**	EPA 6010D	AAP	2
		Pace ATL SOP #0045	ALW	1
2623133002	**WAPCS-2**	EPA 6010D	AAP	2
		Pace ATL SOP #0045	ALW	1
2623133003	**WAPCS-3**	EPA 6010D	AAP	2
		Pace ATL SOP #0045	ALW	1

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ANALYTICAL RESULTS

Project: Plant Kraft
Pace Project No.: 2623133

Sample: WAPCS-1 **Lab ID: 2623133001** Collected: 09/13/19 10:00 Received: 09/13/19 16:14 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B							
Arsenic	**5.1**	mg/kg	3.2	1	09/14/19 17:32	09/18/19 19:29	7440-38-2	
Barium	**29.4**	mg/kg	1.1	1	09/14/19 17:32	09/18/19 19:29	7440-39-3	
Percent Moisture	Analytical Method: Pace ATL SOP #0045							
Percent Moisture	**12.7**	%	0.10	1		09/19/19 18:42		

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: Plant Kraft
Pace Project No.: 2623133

Sample: WAPCS-2 **Lab ID: 2623133002** Collected: 09/13/19 09:00 Received: 09/13/19 16:14 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B							
Arsenic	**9.6**	mg/kg	3.8	1	09/14/19 17:32	09/18/19 19:34	7440-38-2	
Barium	**83.2**	mg/kg	1.3	1	09/14/19 17:32	09/18/19 19:34	7440-39-3	
Percent Moisture	Analytical Method: Pace ATL SOP #0045							
Percent Moisture	**20.1**	%	0.10	1		09/19/19 18:43		

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Kraft
Pace Project No.: 2623133

Sample: WAPCS-3 **Lab ID: 2623133003** Collected: 09/12/19 17:30 Received: 09/13/19 16:14 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B							
Arsenic	**4.9**	mg/kg	3.3	1	09/14/19 17:32	09/18/19 19:38	7440-38-2	
Barium	**27.7**	mg/kg	1.1	1	09/14/19 17:32	09/18/19 19:38	7440-39-3	
Percent Moisture	Analytical Method: Pace ATL SOP #0045							
Percent Moisture	**15.1**	%	0.10	1		09/19/19 18:43		

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Kraft
Pace Project No.: 2623133

QC Batch: 35304 Analysis Method: EPA 6010D
QC Batch Method: EPA 3050B Analysis Description: 6010D MET
Associated Lab Samples: 2623133001, 2623133002, 2623133003

METHOD BLANK: 159101 Matrix: Solid
Associated Lab Samples: 2623133001, 2623133002, 2623133003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	2.8	09/18/19 19:19	
Barium	mg/kg	ND	0.93	09/18/19 19:19	

LABORATORY CONTROL SAMPLE: 159102

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	90.9	91.1	100	80-120	
Barium	mg/kg	90.9	91.4	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159103 159104

Parameter	Units	2623089002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	23.6	111	113	127	131	94	95	75-125	3	20	
Barium	mg/kg	42.5	111	113	153	160	100	104	75-125	4	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Kraft
Pace Project No.: 2623133

QC Batch: 35662 Analysis Method: Pace ATL SOP #0045
QC Batch Method: Pace ATL SOP #0045 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 2623133001, 2623133002, 2623133003

SAMPLE DUPLICATE: 160602

Parameter	Units	2623085001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	62.3	61.2	2	10	

SAMPLE DUPLICATE: 160603

Parameter	Units	2623133002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.1	20.7	3	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Kraft
Pace Project No.: 2623133

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft
Pace Project No.: 2623133

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623133001	**WAPCS-1**	EPA 3050B	35304	EPA 6010D	35318
2623133002	**WAPCS-2**	EPA 3050B	35304	EPA 6010D	35318
2623133003	**WAPCS-3**	EPA 3050B	35304	EPA 6010D	35318
2623133001	**WAPCS-1**	Pace ATL SOP #0045	35662		
2623133002	**WAPCS-2**	Pace ATL SOP #0045	35662		
2623133003	**WAPCS-3**	Pace ATL SOP #0045	35662		

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Resolute Environmental & Water Resources
1003 Weatherstone Parkway Suite 320
Woodstock, GA 30188

Billing Information:
Accounts Payable
1003 Weatherstone Parkway
Suite 320
Woodstock, GA 30188

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Lea Millet

Email To: trent.godwin@resoluteenv.com;lea.millet@resoluteenv.com;CCOLEMAN@sou

Project Description: Plant Kraft

City/State Collected: Port Wentworth, GA

Phone: 251.776.2760
Fax:

Client Project #

Lab Project #
RESENVWGA-KRAFT

L #

Table #

Collected by (print): Trent Godwin

Site/Facility ID #

P.O. #

Acctnum: RESENVWGA

Template:

Prelogin:

TSR: 526

PB:

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ASICP, BAICP, TS 4 ozClr-NoPres	Remarks	Sample # (lab only)
WAPCS-1	Gr	SS	5.0	9.13.19	1000	1	X		
WAPCS-2	Gr	SS	5.0	9.13.19	0900	1	X		
WAPCS-3	Gr	SS	5.0	9.R.19	1730	1	X		

WO# : 2623133

2623133

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Trent Godwin	9.13.19	1130	Kevin Stephenson	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
Kevin Stephenson	9/13/19	1614	MZahman	18°C
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			MZahman	9/13/19 1624

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Condition Upon Receipt

Pace Analytical

Client Name: Resolute Env. Project #

WO#: 2623133

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Other

Tracking #:

PM: NJK Due Date: 09/14/19

CLIENT: RES-ENV

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used 83 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.8°C Biological Tissue is Frozen: Yes No

Date and initials of person examining contents: 9/13/19 AP

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SD		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

APPENDIX K

Appendix K - Field Parameters
Troutman Sanders Plant Kraft
Port Wentworth, Georgia

Well ID	Sample Date	Field Parameters						
		Temp (°C)	pH (pH)	SpCond. (µS/cm)	Turbidity (NTU)	DTW (ft)	RDO (mg/L)	ORP (mV)
KMW-01	9/1/2016	24.76	4.94	4994.75	2.69	14.40	0.12	-21.78
	1/30/2017	21.08	4.38	5477.29	2.27	12.50	0.10	140.93
	2/7/2018	21.73	3.95	5769.12	4.43	14.16	0.08	250.51
	5/7/2018	23.34	4.07	5774.89	3.52	14.18	0.10	128.58
	10/9/2018	25.13	4.17	5610.24	4.73	13.9	0.09	142.72
KMW-02	9/1/2016	26.23	5.76	563.11	3.89	11.01	0.06	-54.97
	1/30/2017	22.88	5.47	489.34	2.86	9.22	0.06	-1.02
	2/15/2017	22.63	5.31	590.23	3.25	9.86	0.05	75.95
	2/7/2018	23.53	5.34	658.13	8.25	10.44	0.04	139.91
	10/9/2018	24.69	5.54	611.77	4.24	10.53	0.07	76.47
KMW-03	2/19/2018	21.12	5.89	502.33	4.75	15.25	0.13	15.70
	10/10/2018	25.23	5.05	937.35	2.38	14.75	0.49	100.35
KMW-04	2/6/2018	22.76	5.54	1887.42	4.42	10.55	0.09	95.15
	10/10/2018	24.93	5.55	1765.2	4.34	10.12	0.07	90.46
KMW-05	9/1/2016	23.79	5.66	7117.91	2.53	15.03	0.08	-61.34
	1/30/2017	21.38	5.31	6391.61	3.95	12.66	0.14	74.29
	2/6/2018	21.94	5.28	6042.00	4.43	15.35	1.83	125.75
	10/10/2018	24.78	5.29	5971.25	0.48	14.81	0.08	167.47
KMW-06	9/1/2016	23.2	6.13	7242.45	2.64	16.39	0.13	-94.25
	1/30/2017	16.66	4.47	6374.04	0.88	14.20	0.14	138.91
	2/6/2018	20.95	4.89	7052.27	3.47	16.35	0.09	138.23
	10/10/2018	24.93	4.93	7433.35	3.88	14.94	0.09	152.52
KMW-07	9/1/2016	23.63	5.63	3634.82	4.4	15.60	0.06	-104.04
	1/30/2017	20.18	4.86	3991.57	4.33	13.88	0.11	137.57
	2/6/2018	21.05	4.16	3340.43	4.42	15.50	0.46	119.02
	10/10/2018	25.32	4.20	2997.62	3.13	14.99	0.06	147.39
KMW-08	8/4/2017	23.47	5.61	111.38	4.8	10.78	0.10	65.00
	2/8/2018	21.39	5.15	96.65	0.98	13.20	0.18	211.82
	10/9/2018	22.93	5.31	117.14	0.69	13.21	0.06	75.48
KMW-09	8/3/2017	23.82	6.20	566.17	1.25	9.14	0.11	20.98
	2/8/2018	20.89	6.39	451.99	4.35	10.44	0.05	12.03
	10/9/2018	24.33	6.70	397.22	8.69	10.39	0.06	-29.68
KMW-10	8/4/2017	24.31	6.21	595.80	0.33	8.21	0.04	1.12
	2/8/2018	21.44	6.43	232.76	3.32	9.52	0.06	36.94
	10/10/2018	24.59	6.45	245.47	0.41	9.33	0.22	58.53
KMW-11	8/4/2017	25.96	6.46	1643.35	3.82	8.77	0.10	9.25
	2/8/2018	22.03	7.02	1486.00	6.54	9.97	0.07	-106.59
	10/10/2018	26.28	7.18	1487.40	7.32	8.80	0.07	-124.33
KMW-12	8/4/2017	25.71	6.20	4655.33	3.91	8.36	0.14	-12.38
	2/8/2018	23.05	6.04	5006.09	0.72	0.26	0.09	83.85
	10/10/2018	25.41	6.37	5157.00	1.25	8.43	0.12	-32.7
KMW-13	2/19/2018	22.63	6.26	1146.23	2.62	15.20	0.10	-1.20
	10/9/2018	22.97	5.92	342.53	2.53	14.97	0.10	113.65
MW-15	1/31/2017	19.16	6.18	3970.81	2.73	6.91	0.03	-89.26
MW-15AR	8/4/2017	24.95	6.54	1912.37	1.51	14.81	0.78	-87.58
	10/11/2018	25.87	6.59	3755.15	6.15	14.23	0.07	-94.66
MW-15CR	10/11/2018	25.67	6.32	3314.34	7.10	13.32	0.04	-41.35
MW-15D	1/31/2017	20.73	6.31	6229.09	4.24	10.87	0.11	-103.66
MW-15DR	8/4/2017	23.83	6.80	4491.77	1.44	10.26	0.03	-132.19
	2/9/2018	19.01	6.41	4360.6	4.85	11.47	0.08	-117.28
	10/11/2018	24.5	6.35	5053.50	1.67	9.82	0.02	-5.94
MW-16	11/1/2018	26.47	6.20	855.95	7.20	13.16	0.06	-61.16
MW-17	11/1/2018	27.64	7.06	1798.14	1.37	9.41	0.07	-318.80
MW-18	11/1/2018	26.19	6.31	1685.31	2.43	17.02	1.90	-52.80
MW-19	11/1/2018	25.55	6.21	1787.73	1.76	14.15	1.26	-12.37

Prepared By	AC
Checked By	KS

Product Name: Low-Flow System

Date: 2016-07-22 11:22:20

Project Information:		Pump Information:	
Operator Name	John Hash man	Pump Model/Type	GeoSub
Company Name	Resolute	Tubing Type	LDPE
Project Name	Well Development	Tubing Diameter	.375 in
Site Name	Kraft	Tubing Length	32 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449622		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	24 ft

Well Information:		Pumping Information:	
Well ID	KMW-04	Final Pumping Rate	4300 mL/min
Well diameter	2 in	Total System Volume	0.7849967 L
Well Total Depth	26.02 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	60 in
Depth to Water	9.23 ft	Total Volume Pumped	86 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 10		+/- 1000%	+/- 1000%
Last 5	11:04:03	240.06	21.97	5.59	2535.40	7.15	14.20	0.00	-35.97
Last 5	11:08:03	480.02	21.87	5.61	2455.89	5.59	14.09	-0.00	-38.11
Last 5	11:12:03	720.02	21.84	5.59	2575.22	3.08	14.11	-0.01	-37.10
Last 5	11:16:03	960.02	21.84	5.58	2564.80	3.37	14.18	-0.01	-35.55
Last 5	11:20:03	1200.02	21.84	5.56	2543.25	2.34	14.24	-0.01	-33.93
Variance 0			-0.03	-0.02	119.33			-0.00	1.01
Variance 1			0.00	-0.01	-10.42			-0.00	1.56
Variance 2			-0.00	-0.02	-21.55			-0.00	1.62

Notes

Purged 20 gallons pre-measurements. Purged for 21 minutes.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-22 12:28:15

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	Whale
Company Name	Resolute	Tubing Type	LDPE
Project Name	Well Development	Tubing Diameter	.375 in
Site Name	Kraft	Tubing Length	32 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	440275		
Turbidity Make/Model	LaMotte 2020	Pump placement from TOC	26 ft

Well Information:		Pumping Information:	
Well ID	KMW-5	Final Pumping Rate	6000 mL/min
Well diameter	2 in	Total System Volume	0.7849967 L
Well Total Depth	28.52 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	60.6 in
Depth to Water	14.34 ft	Total Volume Pumped	240 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000	+/- 0.1	+/- 5%	+/- 1000		+/- 1000	+/- 1000
Last 5	12:07:44	1440.02	22.41	5.21	6644.11	39.70	19.36	0.21	28.66
Last 5	12:11:43	1680.02	22.44	5.19	6638.02	15.46	19.38	0.23	29.19
Last 5	12:15:44	1920.02	22.45	5.19	6771.96	12.01	19.39	0.24	29.56
Last 5	12:19:44	2160.02	22.44	5.18	6712.37	10.13	19.39	0.27	30.28
Last 5	12:23:44	2400.02	22.43	5.17	6800.62	6.40	19.39	0.26	30.62
Variance 0			0.00	0.00	133.94			0.01	0.37
Variance 1			-0.00	-0.01	-59.59			0.03	0.73
Variance 2			-0.01	-0.01	88.25			-0.01	0.34

Notes

~14 gal pre-development purge

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-22 13:33:10

Project Information:		Pump Information:	
Operator Name	John Hash man	Pump Model/Type	GeoSub
Company Name	Resolute	Tubing Type	LDPE
Project Name	Well Development	Tubing Diameter	.375 in
Site Name	Kraft	Tubing Length	44 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449622		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	36 ft

Well Information:		Pumping Information:	
Well ID	KMW-6	Final Pumping Rate	4500 mL/min
Well diameter	2 in	Total System Volume	1.04562 L
Well Total Depth	38.21 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	26.6 in
Depth to Water	16.6 ft	Total Volume Pumped	105 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 10		+/- 1000%	+/- 1000%
Last 5	13:23:23	240.02	21.90	5.39	6956.92	2.25	18.82	-0.01	26.48
Last 5	13:27:23	480.02	21.69	5.38	7000.21	2.60	18.88	-0.02	26.31
Last 5	13:31:23	720.02	21.69	5.38	6995.58	1.05	18.82	-0.02	27.09
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.21	-0.01	43.29			-0.00	-0.17
Variance 2			-0.01	0.00	-4.63			-0.00	0.78

Notes

15 gallons pre-purged. Experiment had stabilized but has to be repeated due to data loss due to overheating. 105 L total is both development attempts.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-22 09:56:14

Project Information:		Pump Information:	
Operator Name	John Hash man	Pump Model/Type	GeoSub
Company Name	Resolute	Tubing Type	LDPE
Project Name	Well Development	Tubing Diameter	.375 in
Site Name	Kraft	Tubing Length	34 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449622		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	27 ft

Well Information:		Pumping Information:	
Well ID	KMW-7	Final Pumping Rate	4500 mL/min
Well diameter	2 in	Total System Volume	0.8284339 L
Well Total Depth	28.23 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	19 in
Depth to Water	15.03 ft	Total Volume Pumped	90 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 10		+/- 1000%	+/- 1000%
Last 5	09:38:17	240.02	21.73	4.76	3142.77	1.85	16.60	0.00	-24.64
Last 5	09:42:17	480.02	21.67	4.74	3166.76	0.92	16.60	-0.00	-24.73
Last 5	09:46:17	720.02	21.68	4.73	3219.07	0.80	16.60	-0.01	-21.92
Last 5	09:50:17	960.02	21.67	4.69	3245.50	0.49	16.62	-0.01	-15.53
Last 5	09:54:17	1200.02	21.69	4.65	3283.12	0.32	16.61	-0.01	-8.04
Variance 0			0.01	-0.01	52.32			-0.00	2.81
Variance 1			-0.02	-0.05	26.42			-0.00	6.39
Variance 2			0.02	-0.04	37.63			-0.00	7.48

Notes

Pre purged 20 gal at a rate of 5000 ml/min

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-22 10:20:24

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	Whale
Company Name	Resolute	Tubing Type	LDPE
Project Name	Well Development	Tubing Diameter	.375 in
Site Name	Kraft	Tubing Length	33 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	440275		
Turbidity Make/Model	LaMotte 2020	Pump placement from TOC	27 ft

Well Information:		Pumping Information:	
Well ID	KMW-1	Final Pumping Rate	6000 mL/min
Well diameter	2 in	Total System Volume	0.8067153 L
Well Total Depth	29.02 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	56.04 in
Depth to Water	13.77 ft	Total Volume Pumped	102 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000	+/- 0.1	+/- 5%	+/- 1000		+/- 1000	+/- 1000
Last 5	10:02:45	240.08	21.91	5.25	2818.50	52.10	18.34	0.04	40.15
Last 5	10:06:45	480.02	21.82	5.19	3046.76	18.40	18.40	0.02	35.13
Last 5	10:10:45	720.02	21.82	5.14	3145.20	12.06	18.45	0.01	34.29
Last 5	10:14:45	960.02	21.82	5.11	3130.15	6.73	18.44	0.01	32.90
Last 5									
Variance 0			-0.09	-0.05	228.26			-0.02	-5.02
Variance 1			0.00	-0.05	98.44			-0.01	-0.84
Variance 2			-0.00	-0.03	-15.05			-0.00	-1.40

Notes

~ 12 gal pre-development purge

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-22 10:49:51

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	Whale 75
Company Name	Resolute	Tubing Type	LDPE
Project Name	Well Development	Tubing Diameter	.375 in
Site Name	Kraft	Tubing Length	28 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	365491		
Turbidity Make/Model	LaMotte 2020	Pump placement from TOC	23.02 ft

Well Information:		Pumping Information:	
Well ID	KMW-2WD	Final Pumping Rate	3500 mL/min
Well diameter	2 in	Total System Volume	0.6981221 L
Well Total Depth	28.02 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	9 in
Depth to Water	10.61 ft	Total Volume Pumped	56 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 1000%		+/- 1000%	+/- 1000%
Last 5	10:37:01	240.06	23.27	5.79	521.57	10.25	11.35	0.02	2.96
Last 5	10:41:01	480.02	23.22	5.74	520.61	5.67	11.36	0.01	-0.50
Last 5	10:45:01	720.02	23.25	5.72	519.27	3.22	11.36	0.01	-2.29
Last 5	10:49:01	960.02	23.20	5.70	519.56	1.90	11.36	0.01	-3.27
Last 5									
Variance 0			-0.05	-0.05	-0.96			-0.00	-3.46
Variance 1			0.03	-0.02	-1.34			-0.01	-1.79
Variance 2			-0.05	-0.02	0.29			0.00	-0.99

Notes

Pre-purged 150.5 liters.

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-01 14:34:43

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	GeoPump (peristaltic)
Company Name	Resolute	Tubing Type	LDPE
Project Name	Ash Pond GW Sampling	Tubing Diameter	.170 in
Site Name	Kraft	Tubing Length	29 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	365491		
Turbidity Make/Model	LaMotte 2020	Pump placement from TOC	23 ft

Well Information:		Pumping Information:	
Well ID	KMW-5	Final Pumping Rate	300 mL/min
Well diameter	2 in	Total System Volume	0.2194393 L
Well Total Depth	28 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	2.04 in
Depth to Water	14.86 ft	Total Volume Pumped	10.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:12:23	720.02	24.21	5.69	7413.66	5.52	15.03	0.10	-50.95
Last 5	14:16:23	960.02	24.08	5.69	7282.35	4.42	15.03	0.09	-56.53
Last 5	14:20:23	1200.02	23.97	5.67	7188.65	3.53	15.03	0.08	-56.67
Last 5	14:24:23	1440.02	23.79	5.67	7138.81	2.49	15.03	0.07	-59.28
Last 5	14:28:23	1680.02	23.79	5.66	7117.91	2.53	15.03	0.08	-61.34
Variance 0			-0.12	-0.02	-93.70			-0.01	-0.13
Variance 1			-0.17	-0.01	-49.84			-0.01	-2.62
Variance 2			-0.01	-0.01	-20.90			0.01	-2.05

Notes

Start purge at 1355.

DUP-1 collected.

Grab Samples

KMW-5

Metals

KMW-5

Inorganics

KMW-5
    Radium
DUP-2
    Metals
DUP-1
    Inorganics
DUP-1
    Radium

Product Name: Low-Flow System

Date: 2016-09-01 16:23:13

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	GeoPump (peristaltic)
Company Name	Resolute	Tubing Type	LDPE
Project Name	Ash Pond GW Sampling	Tubing Diameter	.170 in
Site Name	Kraft	Tubing Length	42 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	365491		
Turbidity Make/Model	LaMotte 2020	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	KMW-6	Final Pumping Rate	300 mL/min
Well diameter	2 in	Total System Volume	0.2774638 L
Well Total Depth	38 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	4.44 in
Depth to Water	16.02 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:07:40	240.08	23.11	6.06	7294.98	4.24	16.38	0.19	-71.49
Last 5	16:11:40	480.03	23.20	6.10	7267.17	2.65	16.38	0.18	-85.02
Last 5	16:15:40	720.03	23.20	6.13	7242.45	2.64	16.39	0.13	-94.25
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.09	0.04	-27.82			-0.02	-13.52
Variance 2			-0.00	0.04	-24.71			-0.05	-9.23

Notes

Purge started at 1600

Grab Samples

KMW-6

Metals

KMW-6

Inorganics

KMW-6

Radium

Product Name: Low-Flow System

Date: 2016-09-01 14:43:46

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	Geopump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	Ash Pond	Tubing Diameter	0.17 in
Site Name	Kraft	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	364455		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	23.41 ft

Well Information:		Pumping Information:	
Well ID	KMW-7	Final Pumping Rate	250 mL/min
Well diameter	2.0 in	Total System Volume	0.2239027 L
Well Total Depth	28.41 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	0.96 in
Depth to Water	15.82 ft	Total Volume Pumped	12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:29:12	180.03	23.68	5.63	3644.21	7.75	15.60	0.07	-110.71
Last 5	14:32:12	360.01	23.63	5.62	3637.96	6.20	15.60	0.07	-107.48
Last 5	14:35:12	540.01	23.63	5.62	3638.79	4.26	15.60	0.07	-104.70
Last 5	14:38:12	720.01	23.63	5.63	3634.82	4.40	15.60	0.06	-104.04
Last 5									
Variance 0			-0.05	-0.01	-6.25			-0.00	3.23
Variance 1			0.00	-0.00	0.84			-0.00	2.78
Variance 2			0.00	0.01	-3.98			-0.00	0.66

Notes

Peristaltic pump. Plant Kraft

Grab Samples

KMW-7

Metals

KMW-7

Inorganics

KMW-7

Radium

Product Name: Low-Flow System

Date: 2016-09-01 15:56:59

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	Geopump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	Ash Pond	Tubing Diameter	0.17 in
Site Name	Kraft	Tubing Length	31.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	364455		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	24.21 ft

Well Information:		Pumping Information:	
Well ID	KMW-1	Final Pumping Rate	220 mL/min
Well diameter	2.0 in	Total System Volume	0.2283661 L
Well Total Depth	29.21 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	1.1 in
Depth to Water	14.30 ft	Total Volume Pumped	5.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	15:43:14	180.02	24.87	4.91	5109.77	3.96	14.40	0.20	-21.47
Last 5	15:46:14	360.02	24.85	4.93	5018.17	2.96	14.40	0.17	-21.43
Last 5	15:49:14	540.02	24.83	4.94	4988.13	2.70	14.40	0.13	-21.89
Last 5	15:52:14	720.02	24.76	4.94	4994.75	2.69	14.40	0.12	-21.78
Last 5									
Variance 0			-0.02	0.02	-91.60			-0.03	0.04
Variance 1			-0.03	0.01	-30.04			-0.03	-0.46
Variance 2			-0.06	0.00	6.63			-0.01	0.10

Notes

Peristaltic pump. Located by ash pond near fence corner.

Grab Samples

KMW-1

Metals

KMW-1

Inorganics

KMW-1

Radium

Product Name: Low-Flow System

Date: 2016-09-01 13:06:50

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	GeoPump (peristaltic)
Company Name	Resolute	Tubing Type	LDPE
Project Name	Ash Pond GW Sampling	Tubing Diameter	.170 in
Site Name	Kraft	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	365491		
Turbidity Make/Model	LaMotte 2020	Pump placement from TOC	23 ft

Well Information:		Pumping Information:	
Well ID	KMW-2	Final Pumping Rate	250 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	28.03 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.84 in
Depth to Water	10.94 ft	Total Volume Pumped	15 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:44:22	2160.02	25.64	5.76	563.37	5.74	11.01	0.08	-52.32
Last 5	12:48:22	2400.02	25.82	5.76	566.09	5.14	11.01	0.07	-53.81
Last 5	12:52:22	2640.02	25.98	5.76	562.56	4.58	11.01	0.07	-53.88
Last 5	12:56:22	2880.02	26.05	5.76	561.83	4.58	11.01	0.07	-54.38
Last 5	13:00:22	3120.02	26.23	5.76	563.11	3.89	11.01	0.06	-54.97
Variance 0			0.16	-0.00	-3.54			-0.00	-0.07
Variance 1			0.07	0.00	-0.73			-0.01	-0.50
Variance 2			0.18	-0.00	1.28			-0.00	-0.59

Notes

Began pumping at 1200

Reduced flow rate during last 15 minutes of test from 300 ml/min to 167 ml/min and re-calibrated turbidity meter (suspected skewed high from McManus earlier today)

Grab Samples
KMW-2
    Metals
KMW-2
    Cl, F, SO4, TDS
KMW-2
    Radium

Product Name: Low-Flow System

Date: 2017-01-30 15:39:20

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	geopump
Company Name	Resolute	Tubing Type	LDPE
Project Name	GW Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	463072		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	23 ft

Well Information:		Pumping Information:	
Well ID	KMW-02	Final Pumping Rate	300 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	28.23 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.72 in
Depth to Water	9.16 ft	Total Volume Pumped	13.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 1000%		+/- 10%	+/- 1000%
Last 5	15:03:41	719.97	22.73	5.46	499.03	3.09	9.22	0.10	25.79
Last 5	15:07:41	959.97	22.78	5.46	497.45	3.21	9.22	0.65	16.40
Last 5	15:11:41	1199.97	22.77	5.47	494.50	3.11	9.22	0.08	8.25
Last 5	15:15:41	1439.97	22.82	5.47	492.01	2.59	9.22	0.06	3.54
Last 5	15:19:41	1679.96	22.88	5.47	489.34	2.86	9.22	0.06	-1.02
Variance 0			-0.01	0.00	-2.96			-0.57	-8.15
Variance 1			0.04	-0.00	-2.48			-0.02	-4.71
Variance 2			0.06	0.01	-2.68			-0.01	-4.55

Notes

Start purge @ 300 mL/min at 1442.
Sample time 1530. DUP-01 collected along with triplicate radium volume.

Grab Samples

KMW-02

Metals

KMW-02

Inorganics

KMW-02
Radium
DUP-01
Metals
DUP-01
Inorganics
DUP-01
Radium

Product Name: Low-Flow System

Date: 2017-01-30 16:36:11

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	GeoPump
Company Name	Resolute	Tubing Type	LDPE
Project Name	January Ash Pond Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	29.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	364455		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	23.42 ft

Well Information:		Pumping Information:	
Well ID	KMW-07	Final Pumping Rate	190 mL/min
Well diameter	2.0 in	Total System Volume	0.2194393 L
Well Total Depth	28.42 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	13.88 ft	Total Volume Pumped	5.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:13:41	479.95	20.51	4.78	4011.26	7.33	13.90	0.16	150.73
Last 5	16:17:41	719.95	20.37	4.80	3995.71	6.66	13.90	0.14	148.68
Last 5	16:21:42	960.95	20.48	4.82	4010.58	5.41	13.88	0.13	144.52
Last 5	16:25:42	1200.94	20.09	4.82	4022.61	4.83	13.88	0.12	141.46
Last 5	16:29:42	1440.94	20.18	4.86	3991.57	4.33	13.88	0.11	137.57
Variance 0			0.11	0.02	14.87			-0.01	-4.16
Variance 1			-0.40	0.00	12.03			-0.01	-3.06
Variance 2			0.10	0.03	-31.03			-0.01	-3.89

Notes

Peristaltic pump

Drawdown was 0.

Grab Samples

KMW-7

Inorganics

KMW-7

Metals

KMW-7
Radium

Product Name: Low-Flow System

Date: 2017-01-31 10:29:31

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	geopump
Company Name	Resolute	Tubing Type	LDPE
Project Name	GW Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	463072		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	23.5 ft

Well Information:		Pumping Information:	
Well ID	KMW-05	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	28.52 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.84 in
Depth to Water	12.59 ft	Total Volume Pumped	11.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 1000%		+/- 10%	+/- 1000%
Last 5	10:04:15	2879.97	21.15	5.27	6380.64	5.70	12.64	0.15	87.71
Last 5	10:08:15	3119.97	20.71	5.31	6385.14	5.35	12.64	0.16	83.57
Last 5	10:12:15	3359.97	21.01	5.32	6367.82	4.57	12.64	0.15	79.94
Last 5	10:16:15	3599.97	21.29	5.31	6392.68	4.09	12.65	0.14	76.25
Last 5	10:20:15	3839.97	21.38	5.31	6391.61	3.95	12.66	0.14	74.29
Variance 0			0.30	0.01	-17.32			-0.01	-3.63
Variance 1			0.28	-0.01	24.85			-0.01	-3.69
Variance 2			0.10	0.01	-1.07			-0.00	-1.96

Notes

Start purge @ 250 mL/min at 0910.
Flow reduced to 175 mL/min at 0925. Flow reduced to 110 mL/min at 0935. Sample time 1030.

Grab Samples

KMW-05

Metals

KMW-05

Inorganics

KMW-05
Radium

Product Name: Low-Flow System

Date: 2017-01-31 09:38:38

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	GeoPump
Company Name	Resolute	Tubing Type	LDPE
Project Name		Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	39.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	364455		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	33.22 ft

January Ash Pond Sampling

Well Information:		Pumping Information:	
Well ID	KMW-06	Final Pumping Rate	190 mL/min
Well diameter	2.0 in	Total System Volume	0.2640735 L
Well Total Depth	38.22 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.96 in
Depth to Water	14.11 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	09:13:42	240.10	15.72	4.42	6325.51	3.21	14.20	0.27	153.12
Last 5	09:17:42	480.03	16.04	4.43	6310.27	1.17	14.20	0.22	149.52
Last 5	09:21:42	720.02	16.09	4.44	6362.62	0.88	14.20	0.19	145.96
Last 5	09:25:42	960.03	16.46	4.45	6402.99	0.89	14.20	0.17	142.16
Last 5	09:29:42	1200.02	16.66	4.47	6374.04	0.88	14.20	0.14	138.91
Variance 0			0.05	0.01	52.35			-0.03	-3.57
Variance 1			0.37	0.01	40.37			-0.02	-3.80
Variance 2			0.20	0.01	-28.95			-0.02	-3.24

Notes

Peristaltic pump

Cooperative well

Grab Samples

KMW-6

Inorganics

KMW-6

Metals

KMW-6

Radium

Product Name: Low-Flow System

Date: 2017-01-30 15:03:29

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	GeoPump
Company Name	Resolute	Tubing Type	LDPE
Project Name	January Ash Pond Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	30.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	364455		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	24.25 ft

Well Information:		Pumping Information:	
Well ID	KMW-01	Final Pumping Rate	200 mL/min
Well diameter	2.0 in	Total System Volume	0.2239027 L
Well Total Depth	29.25 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.6 in
Depth to Water	12.35 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:45:58	240.05	20.86	4.35	5559.28	3.11	12.50	0.11	150.27
Last 5	14:49:58	479.97	20.90	4.36	5546.30	2.73	12.50	0.10	146.80
Last 5	14:53:58	719.97	21.17	4.37	5514.31	3.03	12.50	0.10	143.59
Last 5	14:57:58	959.97	21.08	4.38	5477.29	--	--	0.10	140.93
Last 5									
Variance 0			0.04	0.01	-12.98			-0.00	-3.47
Variance 1			0.27	0.02	-31.99			-0.01	-3.20
Variance 2			-0.09	0.01	-37.02			-0.00	-2.66

Notes

Peristaltic pump

Accidentally did not enter last readings. Turb: 2.27 NTU DTW: 12.50 ft. Cooperative well

Grab Samples

KMW-1

Inorganics

KMW-1

Metals

Product Name: Low-Flow System

Date: 2017-02-15 10:24:07

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	GeoPump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	Kraft Ash Pond	Tubing Diameter	0.17 in
Site Name	Kraft	Tubing Length	29.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	23.22 ft

Well Information:		Pumping Information:	
Well ID	KMW-02	Final Pumping Rate	200 mL/min
Well diameter	2.0 in	Total System Volume	0.2194393 L
Well Total Depth	28.22 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.6 in
Depth to Water	9.81 ft	Total Volume Pumped	11.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:03:15	1681.98	22.40	5.29	597.27	5.94	9.86	0.06	80.42
Last 5	10:07:15	1921.98	22.46	5.30	594.21	5.15	9.86	0.06	78.99
Last 5	10:11:15	2161.99	22.29	5.30	594.50	4.34	9.85	0.06	78.22
Last 5	10:15:15	2401.99	22.50	5.31	592.33	3.41	9.85	0.05	76.74
Last 5	10:19:15	2641.98	22.63	5.31	590.23	3.25	9.86	0.05	75.95
Variance 0			-0.17	0.00	0.29			-0.00	-0.77
Variance 1			0.22	0.01	-2.17			-0.00	-1.48
Variance 2			0.12	0.01	-2.10			-0.00	-0.79

Notes

Confirmation sampling request of KMW-02.

Grab Samples

KMW-02

Arsenic

KMW-02

Arsenic

Product Name: Low-Flow System

Date: 2017-08-03 10:39:20

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	GeoPump Peristaltic
Company Name	Resolute	Tubing Type	LDPE
Project Name	HSRA GW Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28 ft

Well Information:		Pumping Information:	
Well ID	KMW-10	Final Pumping Rate	420 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	33.07 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	2.16 in
Depth to Water	8.08 ft	Total Volume Pumped	15.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10000	+/- 0.1	+/- 5%	+/- 10000		+/- 0.2	+/- 10000
Last 5	10:21:16	1440.03	23.38	6.10	474.39	0.50	8.25	0.07	29.00
Last 5	10:24:16	1620.03	23.38	6.12	503.94	0.81	8.26	0.06	26.22
Last 5	10:27:16	1800.02	23.34	6.10	535.22	0.78	8.26	0.06	26.13
Last 5	10:30:16	1980.02	23.33	6.14	521.45	0.68	8.26	0.06	20.20
Last 5	10:33:16	2160.02	23.35	6.15	530.44	0.70	8.26	0.07	17.48
Variance 0			-0.04	-0.02	31.28			-0.00	-0.09
Variance 1			-0.00	0.04	-13.77			0.00	-5.93
Variance 2			0.01	0.01	8.99			0.00	-2.72

Notes

Previously purged 5 well volumes (21.8 gal). Well development complete.

Grab Samples

Product Name: Low-Flow System

Date: 2017-08-03 12:02:22

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	GeoPump Peristaltic
Company Name	Resolute	Tubing Type	LDPE
Project Name	HSRA GW Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	30 ft

Well Information:		Pumping Information:	
Well ID	KMW-11	Final Pumping Rate	380 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	33.10 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	4.08 in
Depth to Water	8.61 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10000	+/- 0.1	+/- 5%	+/- 10000		+/- 0.2	+/- 10000
Last 5	11:37:01	360.03	26.04	6.05	1605.92	2.62	8.92	0.16	72.75
Last 5	11:40:01	540.02	24.82	6.19	1655.52	1.80	8.94	0.12	57.66
Last 5	11:43:01	720.02	24.82	6.26	1673.83	2.93	8.94	0.12	45.39
Last 5	11:46:01	900.02	24.77	6.31	1674.35	7.56	8.95	0.12	34.81
Last 5	11:49:01	1080.02	24.75	6.35	1671.95	8.70	8.95	0.13	25.51
Variance 0			0.00	0.07	18.31			-0.00	-12.27
Variance 1			-0.05	0.05	0.52			0.00	-10.58
Variance 2			-0.01	0.04	-2.40			0.01	-9.30

Notes

Previously purged 5 well volumes (21.4 gal). Development complete.

Grab Samples

Product Name: Low-Flow System

Date: 2017-08-03 11:57:44

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	Geopump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	Plant Kraft Development	Tubing Diameter	0.17 in
Site Name	Kraft	Tubing Length	33.82 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	463072		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28.82 ft

Well Information:		Pumping Information:	
Well ID	KMW-12	Final Pumping Rate	400 mL/min
Well diameter	2.00 in	Total System Volume	0.240953 L
Well Total Depth	32.82 ft	Calculated Sample Rate	240 sec
Screen Length	10.00 ft	Stabilization Drawdown	1.05 in
Depth to Water	8.36 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:42:48	240.09	25.30	6.29	3926.28	4.94	8.45	0.11	-16.84
Last 5	11:46:48	480.03	25.39	6.34	3801.80	4.79	8.45	0.10	-28.28
Last 5	11:50:48	720.03	25.33	6.39	3813.80	3.96	8.45	0.09	-37.46
Last 5	11:54:48	960.03	25.23	6.43	3810.41	3.70	8.45	0.09	-45.54
Last 5									
Variance 0			0.09	0.05	-124.48			-0.01	-11.44
Variance 1			-0.06	0.04	12.00			-0.01	-9.18
Variance 2			-0.09	0.04	-3.40			-0.01	-8.08

Notes

Pre pumped by drillers.
Minimal drawdown. Low turbidity.

Grab Samples

Product Name: Low-Flow System

Date: 2017-08-02 11:39:53

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	whale
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	Plant Kraft Well Development	Tubing Diameter	0.375 in
Site Name	Kraft	Tubing Length	35.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	463072		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28.02 ft

Well Information:		Pumping Information:	
Well ID	KMW-09	Final Pumping Rate	5600 mL/min
Well diameter	2.0 in	Total System Volume	0.8501527 L
Well Total Depth	33.02 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	34.2 in
Depth to Water	9.11 ft	Total Volume Pumped	151 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:16:32	240.15	22.48	6.03	497.76	3.06	11.96	0.02	3.59
Last 5	11:20:32	480.03	22.49	6.00	488.05	2.98	11.96	0.02	1.70
Last 5	11:24:32	720.03	22.49	5.97	482.78	2.55	11.96	0.02	0.24
Last 5	11:28:32	959.93	22.51	5.95	473.24	2.64	11.96	0.02	-0.71
Last 5	11:32:32	1199.93	22.52	5.93	466.10	1.75	11.96	0.02	-1.33
Variance 0			-0.00	-0.03	-5.27			-0.00	-1.46
Variance 1			0.02	-0.02	-9.54			-0.00	-0.95
Variance 2			0.01	-0.02	-7.14			-0.00	-0.62

Notes

Pre developed by Trent Godwin
Low turbidity from initial pumping.

Grab Samples

Product Name: Low-Flow System

Date: 2017-08-03 10:35:03

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	Geopump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	Plant Kraft Development	Tubing Diameter	0.17 in
Site Name	Kraft	Tubing Length	27.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	463072		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	19.8 ft

Well Information:		Pumping Information:	
Well ID	KMW-08	Final Pumping Rate	400 mL/min
Well diameter	2.0 in	Total System Volume	0.2105124 L
Well Total Depth	24.80 ft	Calculated Sample Rate	240 sec
Screen Length	10.00 ft	Stabilization Drawdown	1.2 in
Depth to Water	10.75 ft	Total Volume Pumped	9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:16:42	240.10	22.03	5.70	117.89	6.99	10.85	0.12	58.12
Last 5	10:20:42	480.03	22.00	5.66	115.70	6.83	10.85	0.11	56.63
Last 5	10:24:42	720.03	22.01	5.66	113.56	5.77	10.85	0.10	54.92
Last 5	10:28:42	960.02	22.00	5.64	115.21	5.07	10.85	0.10	53.94
Last 5	10:32:43	1201.03	21.93	5.63	113.93	--	--	0.10	53.00
Variance 0			0.01	-0.01	-2.14			-0.01	-1.72
Variance 1			-0.01	-0.01	1.65			-0.00	-0.98
Variance 2			-0.07	-0.01	-1.28			-0.01	-0.94

Notes

Development data collection. Prepurged over 5 well volumes by Trent.
Minimal drawdown and low turbidity.

Grab Samples

Product Name: Low-Flow System

Date: 2017-08-04 11:35:19

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	GeoPump Peristaltic
Company Name	Resolute	Tubing Type	LDPE
Project Name	HSRA GW Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28 ft

Well Information:		Pumping Information:	
Well ID	KMW-10	Final Pumping Rate	330 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	33.07 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	2.04 in
Depth to Water	8.04 ft	Total Volume Pumped	21 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10000	+/- 0.1	+/- 5%	+/- 10000		+/- 0.2	+/- 10000
Last 5	11:18:23	2522.02	24.74	6.17	593.17	0.59	8.21	0.04	13.06
Last 5	11:21:23	2702.02	24.69	6.18	633.19	0.64	8.21	0.04	8.44
Last 5	11:24:23	2882.02	24.66	6.19	597.64	0.77	8.21	0.04	5.02
Last 5	11:27:24	3063.02	24.64	6.21	588.78	0.60	8.21	0.04	3.29
Last 5	11:30:24	3243.02	24.31	6.21	595.80	0.33	8.21	0.04	1.12
Variance 0			-0.04	0.01	-35.55			-0.00	-3.43
Variance 1			-0.02	0.02	-8.86			0.00	-1.72
Variance 2			-0.33	0.00	7.02			-0.00	-2.17

Notes

Start pump @ 330 mL/min at 1036. Sample time 1140.

Grab Samples

KMW-10

Arsenic

KMW-10

Radium

KMW-10

2nd Radium

DUP-01
Arsenic
DUP-01
Radium

Product Name: Low-Flow System

Date: 2017-08-04 13:13:32

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	GeoPump Peristaltic
Company Name	Resolute	Tubing Type	LDPE
Project Name	HSRA GW Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28 ft

Well Information:		Pumping Information:	
Well ID	KMW-11	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	33.10 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	2.16 in
Depth to Water	8.59 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10000	+/- 0.1	+/- 5%	+/- 10000		+/- 0.2	+/- 10000
Last 5	12:56:01	540.03	25.95	6.30	1630.32	2.89	8.84	0.13	51.51
Last 5	12:59:01	720.02	26.05	6.36	1641.55	4.52	8.84	0.13	40.47
Last 5	13:02:01	900.02	25.75	6.40	1637.00	5.30	8.84	0.11	29.85
Last 5	13:05:01	1080.02	25.77	6.44	1652.87	4.03	8.78	0.10	19.52
Last 5	13:08:02	1261.02	25.96	6.46	1643.35	3.82	8.77	0.10	9.25
Variance 0			-0.30	0.04	-4.55			-0.02	-10.61
Variance 1			0.02	0.04	15.87			-0.01	-10.33
Variance 2			0.18	0.03	-9.52			-0.00	-10.27

Notes

Start pump @ 285 mL/min at 1248. Reduce pump to 200 mL/min at 1302. Sample time 1315.

Grab Samples

KMW-11

Radium

Product Name: Low-Flow System

Date: 2017-08-04 12:45:08

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	Geopump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	GPC Plant Kraft	Tubing Diameter	0.17 in
Site Name	Kraft	Tubing Length	34.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	463072		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28.82 ft

Well Information:		Pumping Information:	
Well ID	KMW-12	Final Pumping Rate	220 mL/min
Well diameter	2.0 in	Total System Volume	0.2417564 L
Well Total Depth	32.82 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	0.012 in
Depth to Water	8.35 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:34:07	180.10	25.69	6.14	4694.20	6.44	8.36	0.16	8.28
Last 5	12:37:07	360.04	25.69	6.17	4677.93	6.35	8.36	0.14	-3.32
Last 5	12:40:07	540.03	25.71	6.20	4655.33	3.91	8.36	0.14	-12.38
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.00	0.04	-16.27			-0.01	-11.60
Variance 2			0.02	0.03	-22.60			-0.01	-9.06

Notes

Grab Samples
KMW-12
Radium

Product Name: Low-Flow System

Date: 2017-08-04 11:01:54

Project Information:		Pump Information:	
Operator Name	Robert Mull	Pump Model/Type	Geopump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	August Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	23 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	513028		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	0 ft

Well Information:		Pumping Information:	
Well ID	MW-15AR	Final Pumping Rate	220 mL/min
Well diameter	2 in	Total System Volume	0.1926587 L
Well Total Depth	24.31 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	13.44 in
Depth to Water	13.69 ft	Total Volume Pumped	11 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:44:33	1680.02	24.53	6.51	1865.35	9.53	14.89	0.72	-77.26
Last 5	10:48:33	1920.02	24.15	6.52	1906.17	5.92	14.85	0.93	-80.24
Last 5	10:52:33	2160.02	24.57	6.53	1909.74	4.34	14.82	0.85	-82.80
Last 5	10:56:33	2400.02	24.69	6.53	1906.40	2.71	14.80	0.79	-84.84
Last 5	11:00:33	2640.02	24.95	6.54	1912.37	1.51	14.81	0.78	-87.58
Variance 0			0.43	0.01	3.57			-0.07	-2.56
Variance 1			0.12	0.00	-3.34			-0.06	-2.04
Variance 2			0.26	0.01	5.97			-0.01	-2.74

Notes

Grab Samples
MW-15AR
Radium

Product Name: Low-Flow System

Date: 2017-08-03 15:49:38

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	GeoPump Peristaltic
Company Name	Resolute	Tubing Type	LDPE
Project Name	HSRA GW Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28 ft

Well Information:		Pumping Information:	
Well ID	KMW-09	Final Pumping Rate	315 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	32.99 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	1.68 in
Depth to Water	9.00 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10000	+/- 0.1	+/- 5%	+/- 10000		+/- 0.2	+/- 10000
Last 5	15:31:59	360.02	24.90	6.00	565.84	1.73	9.15	0.19	46.55
Last 5	15:34:59	540.02	24.32	6.08	569.18	1.79	9.14	0.16	38.36
Last 5	15:37:59	720.02	24.08	6.15	567.91	1.11	9.14	0.13	31.13
Last 5	15:40:59	900.02	23.98	6.19	566.65	0.96	9.14	0.12	25.24
Last 5	15:43:59	1080.02	23.82	6.20	566.17	1.25	9.14	0.11	20.98
Variance 0			-0.24	0.06	-1.26			-0.03	-7.22
Variance 1			-0.10	0.04	-1.26			-0.02	-5.89
Variance 2			-0.16	0.02	-0.48			-0.01	-4.26

Notes

Start pump @ 315 mL/min at 1526. Sample time 1555.

Grab Samples

KMW-09

Arsenic

Product Name: Low-Flow System

Date: 2017-08-04 10:54:15

Project Information:		Pump Information:	
Operator Name	Forrest Howard	Pump Model/Type	Geopump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	GPC Plant Kraft	Tubing Diameter	0.17 in
Site Name	Kraft	Tubing Length	26.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	463072		
Turbidity Make/Model	LaMaotte 2020we	Pump placement from TOC	19.80 ft

Well Information:		Pumping Information:	
Well ID	KMW-08	Final Pumping Rate	220 mL/min
Well diameter	2.0 in	Total System Volume	0.206049 L
Well Total Depth	24.80 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	1 in
Depth to Water	10.72 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:45:33	180.09	23.23	5.66	115.32	9.00	10.78	0.11	66.03
Last 5	10:48:33	360.03	22.94	5.61	111.02	8.98	10.78	0.10	65.02
Last 5	10:51:33	539.34	23.47	5.61	111.38	4.80	10.78	0.10	65.00
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.29	-0.04	-4.30			-0.01	-1.02
Variance 2			0.53	-0.01	0.36			-0.00	-0.01

Notes

Developed yesterday.

Grab Samples

KMW-08

Radium

KMW-08

Arsenic

Product Name: Low-Flow System

Date: 2018-02-07 10:00:54

Project Information:		Pump Information:	
Operator Name	Michael Patinkin	Pump Model/Type	GeoPump Peristaltic
Company Name	Resolute	Tubing Type	LDPE
Project Name	Well Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	35 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	364455		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	24 ft

Well Information:		Pumping Information:	
Well ID	KMW-01	Final Pumping Rate	170 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	29.25 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	3.2 in
Depth to Water	13.89 ft	Total Volume Pumped	11 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10000	+/- 0.1	+/- 5%	+/- 10000		+/- 0.2	+/- 10000
Last 5	09:40:48	1680.01	21.77	3.92	5790.73	5.66	14.14	0.09	230.03
Last 5	09:44:48	1920.01	21.79	3.92	5789.13	5.42	14.15	0.09	237.24
Last 5	09:48:48	2160.01	21.74	3.93	5793.68	6.53	14.15	0.08	242.84
Last 5	09:52:48	2400.01	21.74	3.94	5769.36	4.44	14.15	0.08	246.94
Last 5	09:56:48	2640.01	21.73	3.95	5769.12	4.43	14.16	0.08	250.51
Variance 0			-0.06	0.00	4.55			-0.01	5.60
Variance 1			-0.00	0.02	-24.32			-0.00	4.10
Variance 2			-0.00	0.00	-0.24			-0.00	3.57

Notes

Start pump @ 170 mL/min at 0855. Sample time 1000.

Grab Samples

KMW-06

Arsenic

KMW-01

Major Ions

KMW-01

Radium

Product Name: Low-Flow System

Date: 2018-11-01 09:58:31

Project Information:		Pump Information:	
Operator Name	Robert Mull	Pump Model/Type	Peristaltic
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	Well Development	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	27 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	553835		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	20 ft

Well Information:		Pumping Information:	
Well ID	MW-17	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2105124 L
Well Total Depth	23.31 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	6.86 in
Depth to Water	12.61 ft	Total Volume Pumped	3.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000%
Last 5	09:44:50	180.05	25.17	6.81	1772.92	0.12	13.17	0.08	-237.13
Last 5	09:47:50	360.03	25.22	6.82	1769.61	0.23	13.18	0.07	-273.52
Last 5	09:50:50	540.03	25.24	6.87	1768.16	0.15	13.19	0.07	-293.13
Last 5	09:53:50	720.03	25.28	6.90	1760.83	0.30	13.19	0.07	-304.30
Last 5	09:56:50	900.03	25.31	6.90	1759.59	0.37	13.19	0.07	-307.84
Variance 0			0.02	0.05	-1.46			-0.00	-19.62
Variance 1			0.04	0.03	-7.32			-0.00	-11.17
Variance 2			0.02	0.01	-1.25			-0.00	-3.53

Notes

Purged 55 gal over two days. Goes dry with whale pump so using Peristaltic to Troll
Water is dark with low turbidity

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-31 17:38:58

Project Information:		Pump Information:	
Operator Name	Robert Mull	Pump Model/Type	Peristaltic
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	We'll Development	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	27 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	553835		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	20 ft

Well Information:		Pumping Information:	
Well ID	MW-16	Final Pumping Rate	190 mL/min
Well diameter	2 in	Total System Volume	0.2105124 L
Well Total Depth	23.28 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	10.08 in
Depth to Water	8.76 ft	Total Volume Pumped	7.1 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000%
Last 5	17:25:52	1440.03	25.99	6.10	807.01	6.98	9.58	0.11	9.27
Last 5	17:28:52	1620.02	25.96	6.12	807.62	6.33	9.60	0.11	3.62
Last 5	17:31:52	1800.02	25.92	6.12	807.74	5.46	9.60	0.11	-1.70
Last 5	17:34:52	1980.02	25.87	6.10	808.35	5.15	9.60	0.11	-5.32
Last 5	17:37:52	2160.02	25.85	6.10	808.08	4.90	9.60	0.11	-10.25
Variance 0			-0.04	-0.00	0.12			-0.00	-5.32
Variance 1			-0.05	-0.02	0.61			-0.00	-3.62
Variance 2			-0.02	0.00	-0.27			-0.00	-4.93

Notes

Purged over 5 well volumes (29 gal) with whale pump. Well kept going dry so switched to Peristaltic pump to troll

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-31 11:17:20

Project Information:		Pump Information:	
Operator Name	Robert Mull	Pump Model/Type	Whale Pump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	We'll Development	Tubing Diameter	0.375 in
Site Name	Plant Kraft	Tubing Length	28 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	553835		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	19 ft

Well Information:		Pumping Information:	
Well ID	MW-18	Final Pumping Rate	2 gal/min
Well diameter	2 in	Total System Volume	0.1843042 gal
Well Total Depth	22.00 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	13.92 in
Depth to Water	16.26 ft	Total Volume Pumped	36 gal

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000%
Last 5	11:04:02	360.03	24.06	5.73	1776.64	2.58	17.69	0.13	9.67
Last 5	11:07:02	540.03	24.01	5.78	1778.08	2.75	17.63	0.12	-3.41
Last 5	11:10:02	720.03	23.97	5.81	1779.04	2.36	17.56	0.11	-14.70
Last 5	11:13:02	900.03	23.93	5.84	1780.95	2.49	17.48	0.10	-25.50
Last 5	11:16:05	1083.03	23.90	5.86	1783.11	2.21	17.42	0.11	-34.05
Variance 0			-0.05	0.03	0.96			-0.01	-11.29
Variance 1			-0.04	0.03	1.91			-0.02	-10.80
Variance 2			-0.03	0.02	2.16			0.02	-8.56

Notes

Prepurged 38 gal

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-31 10:19:38

Project Information:		Pump Information:	
Operator Name	Robert Mull	Pump Model/Type	Whale Pump
Company Name	Resolute Env	Tubing Type	LDPE
Project Name	We'll Development	Tubing Diameter	0.375 in
Site Name	Plant Kraft	Tubing Length	29 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	553835		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	18.9 ft

Well Information:		Pumping Information:	
Well ID	MW-19	Final Pumping Rate	1.25 gal/min
Well diameter	2 in	Total System Volume	0.190038 gal
Well Total Depth	22.40 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	23.16 in
Depth to Water	15.65 ft	Total Volume Pumped	25 gal

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000%
Last 5	10:05:08	360.03	23.91	5.63	1736.97	6.84	17.73	0.16	52.55
Last 5	10:08:08	540.03	23.90	5.69	1754.96	5.63	17.68	0.16	41.91
Last 5	10:11:10	722.03	23.90	5.70	1763.85	4.02	17.62	0.16	31.19
Last 5	10:14:10	902.03	23.89	5.71	1749.85	6.05	17.55	0.15	22.51
Last 5	10:17:10	1082.02	23.88	5.76	1750.08	3.49	17.58	0.15	13.67
Variance 0			-0.00	0.01	8.89			-0.00	-10.72
Variance 1			-0.01	0.01	-14.01			-0.01	-8.68
Variance 2			-0.01	0.05	0.23			0.00	-8.84

Notes

Prepurged 55 gal

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-11 11:35:57

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October 2018 Northern Area	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	29 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	21.00 ft

Well Information:		Pumping Information:	
Well ID	MW-15C(R)	Final Pumping Rate	180 mL/min
Well diameter	2 in	Total System Volume	0.2194393 L
Well Total Depth	26.00 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	9 in
Depth to Water	12.57 ft	Total Volume Pumped	4.32 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000%
Last 5	11:16:53	720.07	25.44	6.32	3304.12	12.00	13.32	0.06	-8.50
Last 5	11:20:53	960.04	25.43	6.33	3321.42	11.80	13.32	0.05	-18.29
Last 5	11:24:53	1200.02	25.65	6.32	3321.58	7.75	13.32	0.05	-27.12
Last 5	11:28:53	1440.02	25.57	6.33	3312.77	7.27	13.32	0.05	-34.73
Last 5	11:32:54	1680.84	25.67	6.32	3314.34	7.10	13.32	0.04	-41.35
Variance 0			0.22	-0.00	0.16			-0.00	-8.83
Variance 1			-0.08	0.00	-8.82			-0.00	-7.61
Variance 2			0.10	-0.00	1.57			-0.01	-6.61

Notes

Pre-purged 1 liter.

Grab Samples

MW-15C(R)

VOC

MW-15C(R)

PCB

Product Name: Low-Flow System

Date: 2018-10-10 14:46:50

Project Information:		Pump Information:	
Operator Name	Veronica Fay	Pump Model/Type	Geopump Peristaltic Pump
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	33 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	588863		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	27.85 ft

Well Information:		Pumping Information:	
Well ID	KMW-12	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.237293 L
Well Total Depth	32.85 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	2.28 in
Depth to Water	8.24 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:32:26	180.13	26.55	6.35	5081.48	1.69	8.37	0.35	-14.33
Last 5	14:35:26	360.02	25.73	6.35	5146.31	1.45	8.39	0.22	-23.08
Last 5	14:38:26	540.02	25.58	6.36	5154.76	1.48	8.40	0.17	-27.71
Last 5	14:41:26	720.01	25.60	6.37	5151.23	1.40	8.42	0.14	-30.78
Last 5	14:44:26	900.01	25.41	6.37	5157.00	1.25	8.43	0.12	-32.70
Variance 0			-0.14	0.01	8.45			-0.05	-4.63
Variance 1			0.01	0.01	-3.53			-0.03	-3.08
Variance 2			-0.19	0.01	5.76			-0.01	-1.92

Notes

Prepurged 3L. Purged a few ants initially.
Well performed beautifully

Grab Samples

KMW-12

Radium

Product Name: Low-Flow System

Date: 2018-10-09 12:09:04

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	24.30 ft

Well Information:		Pumping Information:	
Well ID	KMW-01	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	29.30 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.36 in
Depth to Water	13.87 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:50:03	240.08	26.87	4.18	5647.98	8.37	13.90	0.15	142.29
Last 5	11:54:03	480.02	26.77	4.16	5669.26	6.70	13.90	0.12	142.17
Last 5	11:58:03	720.02	26.31	4.16	5636.74	4.86	13.90	0.10	142.37
Last 5	12:02:03	960.02	25.32	4.17	5630.71	4.77	13.90	0.09	142.65
Last 5	12:06:04	1200.84	25.13	4.17	5610.24	4.73	13.90	0.09	142.72
Variance 0			-0.46	0.00	-32.52			-0.02	0.20
Variance 1			-0.99	0.00	-6.03			-0.01	0.28
Variance 2			-0.19	0.01	-20.47			-0.01	0.07

Notes

Pre-purged 2 liters.

Grab Samples

KMW-01

Radium

Product Name: Low-Flow System

Date: 2018-10-09 16:01:10

Project Information:		Pump Information:	
Operator Name	Veronica Fay	Pump Model/Type	Geopump Peristaltic Pump
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	28 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	588863		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	23 ft

Well Information:		Pumping Information:	
Well ID	KMW-02	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2149758 L
Well Total Depth	28.26 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	0.82 in
Depth to Water	10.46 ft	Total Volume Pumped	12.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	15:45:29	4320.90	24.78	5.54	616.43	5.27	10.53	0.07	75.12
Last 5	15:48:29	4500.89	24.77	5.54	614.07	5.29	10.53	0.07	75.48
Last 5	15:51:29	4680.89	24.76	5.54	608.39	4.27	10.53	0.07	75.88
Last 5	15:54:29	4860.88	24.70	5.54	609.91	4.24	10.53	0.07	76.21
Last 5	15:57:28	5040.88	24.69	5.54	611.77	4.24	10.53	0.07	76.47
Variance 0			-0.01	0.00	-5.68			-0.00	0.40
Variance 1			-0.06	-0.00	1.52			-0.00	0.33
Variance 2			-0.01	-0.00	1.86			-0.00	0.26

Notes

Prepurged 2L. Well performed well. Took a little time for turbidity to drop below 5Ntu

Grab Samples

KMW-02

Radium

DUP-2

Radium

Product Name: Low-Flow System

Date: 2018-10-09 09:39:48

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	26 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	19.80 ft

Well Information:		Pumping Information:	
Well ID	KMW-08	Final Pumping Rate	160 mL/min
Well diameter	2 in	Total System Volume	0.206049 L
Well Total Depth	24.80 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.36 in
Depth to Water	13.18 ft	Total Volume Pumped	3.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	09:22:09	240.10	23.08	5.34	116.63	2.10	13.22	0.09	83.43
Last 5	09:26:09	480.03	22.91	5.31	117.09	2.05	13.22	0.08	78.93
Last 5	09:30:09	720.12	22.94	5.32	116.81	1.13	13.21	0.06	76.47
Last 5	09:34:09	960.12	22.93	5.30	117.75	1.61	13.22	0.06	76.66
Last 5	09:38:09	1200.12	22.93	5.31	117.14	0.69	13.21	0.06	75.48
Variance 0			0.03	0.01	-0.29			-0.01	-2.45
Variance 1			-0.01	-0.02	0.94			-0.00	0.19
Variance 2			0.00	0.02	-0.60			-0.01	-1.18

Notes

Pre-purged 3 liters.

Grab Samples

KMW-08

Radium

Product Name: Low-Flow System

Date: 2018-10-09 12:42:43

Project Information:		Pump Information:	
Operator Name	Veronica Fay	Pump Model/Type	Geopump Peristaltic Pump
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	33 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	588863		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	28 ft

Well Information:		Pumping Information:	
Well ID	KMW-09	Final Pumping Rate	230 mL/min
Well diameter	2 in	Total System Volume	0.237293 L
Well Total Depth	32.99 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	10.46 ft	Total Volume Pumped	19.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:22:35	10561.70	25.86	6.70	396.77	8.65	10.35	0.07	-30.85
Last 5	12:26:35	10801.69	25.59	6.70	395.99	7.82	10.36	0.07	-31.06
Last 5	12:30:35	11041.68	25.51	6.70	395.66	8.45	10.36	0.07	-31.19
Last 5	12:34:35	11281.68	24.47	6.70	398.40	8.99	10.39	0.06	-29.89
Last 5	12:38:35	11521.67	24.33	6.70	397.22	8.69	10.39	0.06	-29.68
Variance 0			-0.09	-0.00	-0.33			0.00	-0.12
Variance 1			-1.04	0.00	2.74			-0.01	1.29
Variance 2			-0.14	-0.00	-1.18			-0.00	0.21

Notes

Prepurged 10L to try and lower turbidity

Pump rate was adjusted several times to try and lower turbidity below 5 NTU. Adjustments were considered when calculating total volume.

Grab Samples

KMW-09

Radium

Product Name: Low-Flow System

Date: 2018-10-09 10:54:32

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	34 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28.07 ft

Well Information:		Pumping Information:	
Well ID	KMW-10	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2417564 L
Well Total Depth	33.07 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.84 in
Depth to Water	9.26 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:36:02	240.09	24.74	6.36	248.69	0.62	9.32	0.18	66.99
Last 5	10:40:02	480.02	24.70	6.39	249.89	0.84	9.32	0.31	63.84
Last 5	10:44:02	720.02	24.60	6.43	246.88	0.73	9.32	0.19	61.23
Last 5	10:48:02	960.02	24.65	6.43	247.69	0.56	9.33	0.20	59.92
Last 5	10:52:02	1200.02	24.59	6.45	245.47	0.41	9.33	0.22	58.53
Variance 0			-0.11	0.04	-3.02			-0.12	-2.60
Variance 1			0.05	-0.00	0.82			0.01	-1.31
Variance 2			-0.05	0.01	-2.22			0.02	-1.40

Notes

Pre-purged 2 liters.

Grab Samples

KMW-10

Radium

Product Name: Low-Flow System

Date: 2018-10-09 15:03:22

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	29 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	23.75 ft

Well Information:		Pumping Information:	
Well ID	KMW-13	Final Pumping Rate	180 mL/min
Well diameter	2 in	Total System Volume	0.2194393 L
Well Total Depth	28.75 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	2.16 in
Depth to Water	14.79 ft	Total Volume Pumped	3.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:46:28	240.08	23.33	5.89	343.78	4.33	14.97	0.55	113.14
Last 5	14:50:28	480.02	23.02	5.91	344.01	3.45	14.97	0.23	113.41
Last 5	14:54:28	720.02	23.06	5.92	344.24	4.06	14.97	0.18	113.66
Last 5	14:58:28	960.02	23.02	5.92	344.63	2.94	14.97	0.10	113.74
Last 5	15:02:28	1200.02	22.97	5.92	342.53	2.53	14.97	0.10	113.65
Variance 0			0.04	0.01	0.23			-0.05	0.25
Variance 1			-0.04	-0.00	0.39			-0.08	0.09
Variance 2			-0.04	0.01	-2.10			0.00	-0.09

Notes

Pre-purged 3 liters

Grab Samples

KMW-13

Radium

Product Name: Low-Flow System

Date: 2018-10-10 09:58:12

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	25.38 ft

Well Information:		Pumping Information:	
Well ID	KMW-03	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	30.38 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.6 in
Depth to Water	14.70 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	09:38:23	240.08	25.23	5.12	933.79	5.29	14.75	0.38	104.51
Last 5	09:42:23	480.02	25.18	5.03	927.41	3.51	14.75	0.39	102.56
Last 5	09:46:23	720.02	25.18	5.03	933.73	2.64	14.75	0.42	101.22
Last 5	09:50:23	960.02	25.23	5.04	924.61	2.06	14.75	0.44	100.39
Last 5	09:54:23	1200.02	25.23	5.05	937.35	2.38	14.75	0.49	100.35
Variance 0			-0.01	-0.00	6.32			0.04	-1.34
Variance 1			0.05	0.01	-9.12			0.02	-0.83
Variance 2			0.00	0.02	12.74			0.05	-0.03

Notes

Pre-purged 4 liters

Grab Samples

KMW-03

Radium

Product Name: Low-Flow System

Date: 2018-10-10 17:09:19

Project Information:		Pump Information:	
Operator Name	Veronica Fay	Pump Model/Type	Geopump Peristaltic Pump
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	26 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	588863		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	21.02 ft

Well Information:		Pumping Information:	
Well ID	KMW-04	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.206049 L
Well Total Depth	26.02 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	1.44 in
Depth to Water	10 ft	Total Volume Pumped	17.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:54:31	4499.91	25.09	5.54	1682.10	5.51	10.12	0.07	90.48
Last 5	16:57:31	4679.90	25.00	5.54	1716.03	5.67	10.12	0.07	90.63
Last 5	17:00:31	4859.90	24.99	5.55	1736.01	4.68	10.12	0.08	90.64
Last 5	17:03:31	5039.89	24.96	5.55	1745.18	4.46	10.12	0.07	90.48
Last 5	17:06:31	5219.89	24.93	5.55	1765.20	4.34	10.12	0.07	90.46
Variance 0			-0.01	0.00	19.97			0.01	0.01
Variance 1			-0.03	0.00	9.17			-0.01	-0.16
Variance 2			-0.03	0.00	20.02			0.01	-0.02

Notes

Prepurged 2L

Took some time for turbidity to drop below 5 Ntu

Grab Samples

KMW-04

Radium

Product Name: Low-Flow System

Date: 2018-10-10 16:21:19

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	23.55 ft

Well Information:		Pumping Information:	
Well ID	KMW-05	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	28.55 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.48 in
Depth to Water	14.77 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:04:22	240.08	25.12	5.27	5943.22	8.58	14.81	0.13	169.57
Last 5	16:08:22	480.02	25.04	5.28	5966.85	6.36	14.81	0.12	168.72
Last 5	16:12:22	720.02	25.23	5.29	5957.36	4.82	14.81	0.10	168.18
Last 5	16:16:22	960.02	25.05	5.29	5957.87	4.90	14.81	0.08	167.80
Last 5	16:20:22	1200.02	24.78	5.29	5971.25	0.48	14.81	0.08	167.47
Variance 0			0.19	0.00	-9.49			-0.02	-0.54
Variance 1			-0.18	-0.00	0.51			-0.01	-0.37
Variance 2			-0.27	-0.00	13.38			0.00	-0.33

Notes

Pre-purged 2 liters.

Grab Samples

KMW-05

Radium

Product Name: Low-Flow System

Date: 2018-10-10 11:57:02

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	33.28 ft

Well Information:		Pumping Information:	
Well ID	KMW-06	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	38.28 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.72 in
Depth to Water	15.88 ft	Total Volume Pumped	5.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:38:32	720.58	24.24	4.92	7403.52	6.12	14.94	0.11	154.72
Last 5	11:42:32	960.58	24.35	4.92	7433.55	5.82	14.94	0.11	154.25
Last 5	11:46:32	1200.58	24.30	4.94	7378.54	4.42	14.94	0.11	153.58
Last 5	11:50:32	1440.58	24.54	4.94	7379.60	4.27	14.94	0.10	153.02
Last 5	11:54:34	1682.58	24.93	4.93	7433.35	3.88	14.94	0.09	152.52
Variance 0			-0.05	0.02	-55.01			0.00	-0.66
Variance 1			0.24	0.01	1.05			-0.01	-0.57
Variance 2			0.39	-0.01	53.75			-0.01	-0.50

Notes

Pre-purged 3 liters.

Grab Samples

KMW-06

Radium

Product Name: Low-Flow System

Date: 2018-10-10 15:16:08

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	501336		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	23.46 ft

Well Information:		Pumping Information:	
Well ID	KMW-07	Final Pumping Rate	160 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	28.46 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0.72 in
Depth to Water	14.93 ft	Total Volume Pumped	6.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:58:34	1680.78	25.27	4.21	2998.95	6.21	14.99	0.09	146.62
Last 5	15:02:34	1920.78	25.38	4.20	2987.80	5.43	14.99	0.11	146.82
Last 5	15:06:34	2160.78	25.50	4.20	2980.73	4.67	14.99	0.10	147.03
Last 5	15:10:34	2400.78	25.51	4.20	2992.76	3.72	14.99	0.06	147.10
Last 5	15:14:34	2640.78	25.32	4.20	2997.62	3.13	14.99	0.06	147.39
Variance 0			0.13	-0.00	-7.07			-0.01	0.21
Variance 1			0.01	-0.00	12.02			-0.03	0.06
Variance 2			-0.20	-0.00	4.86			-0.00	0.30

Notes

Pre-purged 2 liters.

Grab Samples

KMW-07

Radium

Product Name: Low-Flow System

Date: 2018-10-10 12:34:35

Project Information:		Pump Information:	
Operator Name	Veronica Fay	Pump Model/Type	Geopump Peristaltic Pump
Company Name	Resolute Environmental	Tubing Type	LDPE
Project Name	October Radium Sampling	Tubing Diameter	0.17 in
Site Name	Plant Kraft	Tubing Length	33 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	588863		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	28.1 ft

Well Information:		Pumping Information:	
Well ID	KMW-11	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.237293 L
Well Total Depth	33.1 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	9.25 ft	Total Volume Pumped	24.86 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:17:29	12419.69	26.42	7.18	1486.78	8.49	8.80	0.06	-124.82
Last 5	12:20:29	12599.68	26.28	7.18	1490.15	7.62	8.80	0.06	-124.44
Last 5	12:23:29	12779.67	26.37	7.18	1501.60	7.32	8.80	0.07	-124.54
Last 5	12:26:29	12959.68	26.47	7.18	1484.39	7.19	8.80	0.06	-124.59
Last 5	12:29:29	13139.67	26.28	7.18	1487.40	7.32	8.80	0.07	-124.33
Variance 0			0.09	-0.01	11.44			0.00	-0.09
Variance 1			0.10	0.01	-17.21			-0.00	-0.05
Variance 2			-0.19	-0.00	3.01			0.00	0.26

Notes

Prepurged 2L

Varying pump rate due to Peristaltic pump battery dying. Rates were accounted for in total volume. Well influenced by tides.

Grab Samples

KMW-11

Radium

Product Name: Low-Flow System

Date: 2018-11-01 11:45:31

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Env.	Tubing Type	LDPE
Project Name	Nov. GW Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	22 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	553835		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	20.00 ft

Well Information:		Pumping Information:	
Well ID	MW-18	Final Pumping Rate	180 mL/min
Well diameter	2 in	Total System Volume	94.64 mL
Well Total Depth	22.00 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	17.74 ft	Total Volume Pumped	3.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:24:13	240.09	26.58	6.26	1680.28	2.48	17.27	2.19	-49.02
Last 5	11:28:13	480.03	26.42	6.27	1681.38	2.63	17.21	2.08	-50.37
Last 5	11:32:13	720.03	26.36	6.27	1684.48	2.48	17.16	2.02	-50.68
Last 5	11:36:13	960.03	26.30	6.30	1681.46	2.31	17.07	1.93	-52.05
Last 5	11:40:13	1200.03	26.19	6.31	1685.31	2.43	17.02	1.90	-52.80
Variance 0			-0.07	0.00	3.10			-0.06	-0.31
Variance 1			-0.06	0.02	-3.03			-0.09	-1.38
Variance 2			-0.11	0.02	3.86			-0.03	-0.74

Notes

Pre-purged 5 liters.

Grab Samples

MW-18

Metals

MW-18

PCB

MW-8

SVOC

MW-18
VOCs

Product Name: Low-Flow System

Date: 2018-11-01 10:56:47

Project Information:		Pump Information:	
Operator Name	Veronica Fay	Pump Model/Type	Geopump Peristaltic
Company Name	Resolute Env.	Tubing Type	LDPE
Project Name	Nov. GW Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	22 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	2020weLaMotte	Pump placement from TOC	19 ft

Well Information:		Pumping Information:	
Well ID	MW-19	Final Pumping Rate	170 mL/min
Well diameter	2 in	Total System Volume	0.1881953 L
Well Total Depth	22.40 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	14.47 ft	Total Volume Pumped	2.55 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:40:35	180.09	25.53	6.05	1768.77	2.39	14.33	1.24	37.25
Last 5	10:43:35	360.03	25.42	6.11	1775.84	2.00	14.30	1.26	21.77
Last 5	10:46:35	540.03	25.48	6.14	1785.35	1.85	14.25	1.26	7.21
Last 5	10:49:35	720.03	25.51	6.18	1785.73	2.13	14.20	1.25	-4.02
Last 5	10:52:35	900.02	25.55	6.21	1787.73	1.76	14.15	1.26	-12.37
Variance 0			0.07	0.04	9.51			-0.01	-14.56
Variance 1			0.02	0.03	0.38			-0.01	-11.22
Variance 2			0.04	0.03	2.00			0.01	-8.35

Notes

Prepurged 2L

Well performed well. Well highly influenced by tides. Tide was incoming while trolling.

Grab Samples

MW-19

Metals

MW-19

PCB

MW-19
SVOC
MW-19
VOCs

Product Name: Low-Flow System

Date: 2018-11-01 15:09:39

Project Information:		Pump Information:	
Operator Name	Kevin Stephenson	Pump Model/Type	GeoTech Peristaltic
Company Name	Resolute Env.	Tubing Type	LDPE
Project Name	Nov. GW Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	23 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	553835		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	18.35 ft

Well Information:		Pumping Information:	
Well ID	MW-16	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.1926587 L
Well Total Depth	23.35 ft	Calculated Sample Rate	240 sec
Screen Length	10 ft	Stabilization Drawdown	9.24 in
Depth to Water	12.39 ft	Total Volume Pumped	9.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:52:03	1920.02	26.60	6.17	784.15	7.24	13.19	0.06	-57.68
Last 5	14:56:03	2160.02	26.47	6.16	863.41	7.88	13.18	0.06	-58.05
Last 5	15:00:03	2400.01	26.42	6.17	861.43	7.84	13.17	0.06	-58.63
Last 5	15:04:03	2640.01	26.24	6.17	859.30	7.97	13.16	0.06	-59.20
Last 5	15:08:03	2880.01	26.47	6.20	855.95	7.20	13.16	0.06	-61.16
Variance 0			-0.05	0.00	-1.98			-0.00	-0.58
Variance 1			-0.18	0.01	-2.13			-0.00	-0.58
Variance 2			0.23	0.03	-3.35			-0.00	-1.96

Notes

Pre-purged 4 liters.

Grab Samples

MW-16

Metals

MW-16

PCB

MW-16

SVOC

MW-16
VOCs

Product Name: Low-Flow System

Date: 2018-11-01 14:38:12

Project Information:		Pump Information:	
Operator Name	Veronica Fay	Pump Model/Type	Geopump Peristaltic
Company Name	Resolute Env.	Tubing Type	LDPE
Project Name	Nov. GW Sampling	Tubing Diameter	.17 in
Site Name	Plant Kraft	Tubing Length	23 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	2020weLaMotte	Pump placement from TOC	18.31 ft

Well Information:		Pumping Information:	
Well ID	MW-17	Final Pumping Rate	170 mL/min
Well diameter	2 in	Total System Volume	0.1926587 L
Well Total Depth	23.31 ft	Calculated Sample Rate	180 sec
Screen Length	10 ft	Stabilization Drawdown	3.36 in
Depth to Water	9.14 ft	Total Volume Pumped	2.55 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:20:59	180.04	27.99	7.01	1757.28	1.54	9.41	0.10	-279.29
Last 5	14:23:59	360.03	27.73	7.03	1786.36	1.46	9.41	0.09	-314.32
Last 5	14:26:59	540.03	27.60	7.04	1791.60	1.39	9.41	0.09	-318.51
Last 5	14:29:59	720.03	27.68	7.05	1791.54	1.62	9.41	0.08	-318.47
Last 5	14:32:59	900.03	27.64	7.06	1798.14	1.37	9.41	0.07	-318.80
Variance 0			-0.14	0.01	5.25			-0.01	-4.19
Variance 1			0.09	0.01	-0.06			-0.01	0.04
Variance 2			-0.04	0.00	6.60			-0.00	-0.32

Notes

Prepurged 2L

Well was developed 10/31/18-prepurged 5 well volumes. Well was further purged the morning of 11/1/18 . Well performed well

Grab Samples

MW-17

Metals

MW-17

PCB

MW-17
SVOC
MW-17
VOCs

APPENDIX L

Appendix L

Historical Data - MW-15D/15DR

Well ID	Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Indeno[1,2,3-cd]pyrene
MW-15(D)	2/2/1998	149	40	47	19
	10/18/1999	<10	<10	<10	<10
	11/3/1999	<10	<10	<10	<10
	2/19/2000	0.2	<0.1	<0.1	<0.2
	4/24/2002	12	3.8	4.9	1.1
	5/21/2002	5.6	1.4	1.8	0.59
	7/23/2002	9.3	3.4	5.4	1.5
	10/9/2002	2.1	0.99	1.5	0.33
	12/12/2003	2.2	0.72	0.74	0.34
	6/30/2004	4.3	0.86	2	0.64
	12/2/2004	2.6	0.18	0.37	<0.2
	12/6/2005	3.6	1.1	1.2	0.9
	6/22/2006	76	20	30	6.2
	9/12/2006	0.78	<0.064	<0.38	<0.25
	11/29/2006	1	0.2	<0.3	<0.2
	7/11/2007	0.52	<0.056	<0.33	<0.22
	12/14/2007	1.4	<0.2	<0.3	<0.2
	6/23/2008	7(J)	1.9	4.3(J)	0.44
	12/8/2008	3.3	1.1	1.7	0.66
	6/22/2009	0.54	<0.2	<0.3	<0.2
	12/28/2009	1.8	<1.2	<1.8	<1.2
	6/24/2010	0.88	<0.29	<0.43	<0.29
	1/5/2011	0.55	0.24	0.36	0.24
	7/6/2011	18.6	6	7.2	2.1
	1/19/2012	4.8	<2	3.9	<2
	7/9/2012	1.4	0.38	0.44	0.23
	1/17/2013	8.9	<3	<3.8	<0.82
	7/17/2013	0.75	<0.2	<0.3	<0.2
	7/20/2013	n/a	n/a	n/a	<0.2
	1/13/2014	1.5	0.74	0.76	0.28
	7/8/2014	0.69	0.21	0.25	<0.2
	1/14/2015	0.37	<0.2	0.21	<0.2
	7/17/2015	0.84	0.28	0.34	<0.2
	1/19/2016	0.5	<0.2	0.2	<0.2
	8/10/2016	4.1	1.2	1.9	0.37
	1/31/2017	0.44	<0.2	<0.2	<0.2

Appendix L

Historical Data - MW-15D/15DR

Well ID	Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Indeno[1,2,3-cd]pyrene
MW-15(D)R	2/2/1998	45	12	12	<4
	10/18/1999	46	16	16	<10
	11/3/1999	<10	<10	<10	<10
	2/19/2000	0.37	<0.1	<0.1	<0.2
	4/24/2002	22	6.7	8.6	2.1
	5/21/2002	5.5	1.4	1.6	0.57
	7/23/2002	8.3	3.2	5.5	1.4
	10/9/2002	5	2.1	3.3	0.65
	12/12/2003	5	1.9	2.5	0.77
	6/30/2004	2.8	0.29	1.5	0.46
	12/2/2004	1.8	<0.051	<0.3	<0.2
	12/6/2005	0.33	0.083	<0.31	<0.21
	6/22/2006	0.8	0.26	0.31	<0.2
	9/12/2006	0.48	0.13	<0.34	<0.23
	11/29/2006	1.6	0.62	0.77	0.39
	7/11/2007	0.49	<0.059	<0.35	<0.23
	12/14/2007	0.59	<0.2	<0.3	<0.2
	6/23/2008	0.98	<0.21	<0.32	<0.21
	12/8/2008	0.31(J)	<0.2	<0.3	<0.2
	6/22/2009	0.5	<0.2	<0.3	<0.2
	12/28/2009	2.8	<0.57	<0.86	<0.57
	6/24/2010	0.64	<0.25	<0.38	0.27
	1/5/2011	0.47	0.23	0.34	0.23
	7/6/2011	0.26	<0.2	<0.3	<0.2
	1/19/2012	1	<2	<3	<2
	7/9/2012	0.68	<0.2	<0.3	<0.2
	1/17/2013	0.83	<0.2	<0.3	<0.2
	7/17/2013	2.8	1.4	<1.5	1.3
	1/13/2014	0.69	<0.2	<0.3	<0.2
	7/8/2014	0.54	<0.2	<0.2	<0.2
	1/14/2015	0.17	<0.2	<0.2	<0.2
	7/17/2015	0.6	<0.2	<0.2	<0.2
	1/19/2016	1.4	0.42	0.62	<0.2
	8/10/2016	2.5	0.61	1	<0.2
	1/31/2017	1.2	0.24	0.43	<0.2
	8/10/2017	0.23	<0.2	<0.2	<0.2
	2/9/2017	0.52	<0.2	0.22	0.052

Notes:

Concentrations in micrograms per liter (ug/L)

J - Estimated concentration above the adjusted MDL and below the RL

n/a - Not analyzed

APPENDIX M

After Recording Return to:
Andrea L. Rimer
Troutman Sanders LLP
Suite 3000 Bank of America Plaza
600 Peachtree Street NE
Atlanta, GA 30308

CROSS-REFERENCE:

County: _____
Deed Book: _____
Page(s): _____

Environmental Covenant

This instrument is an Environmental Covenant executed pursuant to the Georgia Uniform Environmental Covenants Act, O.C.G.A. §§ 44-16-1 *et seq.*, as may be amended from time to time (hereinafter "Act"). This Environmental Covenant is entered into by the entities executing this Environmental Covenant and subjects the property identified below to the activity and/or use limitations and other requirements. This Environmental Covenant further grants such other rights in favor of EPD and Georgia Power Company as set forth herein.

Fee Simple Owner(s)/Grantor(s):
Georgia Power Company
241 Ralph McGill Blvd. NE
Atlanta, GA 30308

Grantee/Holder with the power to enforce:
Georgia Power Company
241 Ralph McGill Blvd. NE
Atlanta, GA 30308

Grantee/Entity with express power to enforce:
State of Georgia
Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive, SE
Suite 1456 East Tower
Atlanta, GA 30334

Persons with Interests other than Fee Simple:
Atlanta Gas Light Company
c/o Southern Company Gas
10 Peachtree Place NE
Atlanta, GA 30309

Savannah Port Authority
c/o Georgia Ports Authority
PO Box 2406
Savannah, GA 31402

Property Subject

The property subject to this Environmental Covenant consists of a tract of approximately 41.868 acres of real property located at 155 Crossgate Road, Port Wentworth, Chatham County, Georgia, which is further identified by the tax parcel ID number below (hereinafter "Property"). The Property was conveyed to Georgia Power Company by that certain: (i) Warranty Deed from Port Wentworth Corporation to Savannah Electric and Power Company dated April 29, 1955, and recorded in Deed Book 61-Y, Page 439, Chatham County, Georgia Records, (ii) Warranty Deed from Georgia-Pacific Corporation to Savannah Electric and Power Company dated December 13, 1968, and recorded in Deed Book 95-B, Page 127, Chatham County, Georgia Records, and (iii) Certificate of Merger of Savannah Electric and Power Company into Georgia Power Company dated July 1, 2006, and recorded in Deed Book 335-D, Page 511, Chatham County, Georgia Records. The Property is located in the Eighth Georgia Militia District of Chatham County, Georgia.

A legal description of the Property is attached as Exhibit A. A survey performed by a licensed surveyor showing the Property is included as Exhibit B.

Tax Parcel ID

1-0727-01-001, Chatham County, Georgia

Environmental Covenant Runs with the Land and is Perpetual

Pursuant to the Act, this Environmental Covenant shall run with the land and shall be perpetual unless terminated or amended pursuant to terms herein or in accordance with provisions of the Act. This Environmental Covenant shall be binding upon Georgia Power Company and all successors, assigns and transferees of any interest in the Property or any portion thereof.

Administrative Records

This Environmental Covenant imposes activity and/or use limitations and other requirements on the Property that arise under corrective action performed and/or being performed at the Savannah Electric – Plant Kraft HSI Site # 10415. Records pertaining to this corrective action are available at the following EPD location(s):

Georgia Environmental Protection Division
Response and Remediation Program
2 MLK Jr. Drive, SE, Suite 1054 East Tower
Atlanta, GA 30334
Monday-Friday 8:00 AM to 4:30 PM, excluding state holidays

Notice: This Property has been listed on the State's Hazardous Site Inventory at HSI # 10415 and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the Property

owner or the Georgia Environmental Protection Division for further information concerning this Property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

Activity and Use Limitations. The Property is subject to the following activity and/or use limitations:

A. The Property shall be used only as non-residential property as defined in Rule 391-3-19-.02(2)(r). Use of the Property as residential property, as defined in Rule 391-3-10-.02(2)(r), is prohibited.

B. The use or extraction of groundwater beneath the Property for drinking water or for any other non-remedial purposes is prohibited.

Other Requirements. The Property is subject to the following additional requirements:

A. Notice of Limitations and Requirements in Future Conveyances. Each instrument hereafter conveying any interest in the Property or any portion thereof that may affect the activity and use limitations described herein shall include a statement that the Property is subject to this Environmental Covenant (and any amendments thereto), the location (County, Deed Book and Page) in the deed records where this Environmental Covenant (and any amendments thereto) is recorded and a copy of this Environmental Covenant (and any amendments thereto).

B. Notice to EPD of Future Conveyances. Within thirty (30) days after each conveyance of a fee simple interest in the Property or any portion thereof, a notice shall be sent to EPD and Georgia Power Company. The notice shall include the new owner's name, address, telephone number and other pertinent contact information, the date of the conveyance and the location (County, Deed Book and Page) where the conveyance is recorded, and, if the conveyance is a portion of the Property, a survey map showing the boundaries of the real property conveyed.

C. Notice of Change of Use. If such activity will materially affect any required monitoring or maintenance of any institutional or engineering controls described herein, the owner of the Property must provide to EPD thirty (30) days' advance written notice of the owner's intent to change the use of the Property, to apply for a building permit for construction at the Property, or to perform any site work.

Environmental Covenant Does Not Authorize Use Otherwise Prohibited

Pursuant to the Act, this Environmental Covenant shall not be construed to authorize a use of the Property that is otherwise prohibited by zoning, ordinance, local law or general law or by a recorded instrument that has priority over this Environmental Covenant.

Rights of Access and Enforcement

Authorized representatives of EPD and Georgia Power Company shall have the right to enter the Property at reasonable times in connection with implementation, compliance, or enforcement of this Environmental Covenant, including but not limited to the right to conduct inspections, examine related records, or to take samples.

This Environmental Covenant shall be enforceable by EPD, Georgia Power Company and other parties as provided in the Act. Such rights of access and enforcement herein shall not limit EPD's authority under other applicable law.

No Interest in Real Property in EPD

EPD's rights under this Environmental Covenant and the Act shall not be considered an interest in real property.

Recording of Environmental Covenant and Service on Other Persons

Within thirty (30) days after execution of this Environmental Covenant by the Director of EPD, Georgia Power Company shall record the Environmental Covenant in every county in which any portion of the Property is located in accordance with the law governing the recording and priority of interests in real property. Upon recording of the Environmental Covenant, Georgia Power Company shall provide in a manner deemed acceptable by EPD a copy of the executed, recorded Environmental Covenant to each of the persons or entities identified in O.C.G.A. § 44-16-7.

Representations and Warranties by Grantor(s). Georgia Power Company represents and warrants that all of the following are true and correct:

A. Georgia Power Company holds fee simple title to the Property.

B. Georgia Power Company has the authority to enter into this Environmental Covenant, has the authority to grant any rights granted by it within, has the ability to carry out the obligations described within and, based upon information and belief after reasonable inquiry, does not know of any anticipated material change in the practices, ownership, or authority of Georgia Power Company that will alter this representation and warranty.

C. The execution and delivery of this Environmental Covenant and carrying out the obligations described within will not conflict with any of the provisions of the organizational documents, operating agreement of Georgia Power Company nor will it violate, contravene and/or constitute a breach or default under any agreement, contract, order or instrument to which Georgia Power Company is a party or by which Georgia Power Company may be bound.

D. Georgia Power Company has identified all persons with existing interests other than fee simple in the Property and has determined the type and status of their

interests; for those interests where the type and/or status make it necessary, the person's agreement to and signature on this Environmental Covenant or subordination of the interest has been obtained; and the aforementioned information regarding all interests other than fee simple in the Property has been provided to EPD.

E. This Environmental Covenant does not authorize a use of the Property that is otherwise prohibited by zoning, ordinance, local law or general law or by a recorded instrument that has priority over this Environmental Covenant.

F. At least thirty (30) days prior to presenting this Environmental Covenant to EPD for execution, Georgia Power Company served a copy of the proposed final text of this Environmental Covenant on all persons or entities required to be noticed in accordance with O.C.G.A. § 44-16-7.

Submission of Required Documents and Communications

Documents and communications required by this Environmental Covenant shall be submitted to:

Georgia Environmental Protection Division
Branch Chief
Land Protection Branch
2 Martin Luther King Jr. Drive SE
Suite 1054 East Tower
Atlanta, GA 30334

With a copy to:

Georgia Power Company
Attn: VP – Environmental Affairs
Bin 10221
241 Ralph McGill Blvd. NE
Atlanta, GA 30308-3374

EPD's Environmental Covenants Registry

This Environmental Covenant and any amendment thereto or termination thereof may be included in EPD's registry for environmental covenants.

Severability

Should any provision of this Environmental Covenant be found by a court of competent jurisdiction to be invalid and/or unenforceable in any respect, the remaining provisions shall continue in full force and effect.

Effective Date

This Environmental Covenant shall be effective on the date the fully executed Environmental Covenant is recorded in accordance with O.C.G.A. § 44-16-8(a).

Grantor has caused this Environmental Covenant to be executed pursuant to The Georgia Uniform Environmental Covenants Act, on the _____ day of _____, 2019.

Signed, sealed, and delivered in the presence of:

_____
Unofficial Witness (*Signature*)

_____
Unofficial Witness Name (*Print*)

_____
Unofficial Witness Address (*Print*)

_____
Notary Public (*Signature*)

My Commission Expires:

_____

For the Grantor/Grantee:

Georgia Power Company
Name of Grantor (*Print*)

_____ (Seal)
Grantor's Authorized Representative (*Signature*)

_____
Authorized Representative Name *(Print)*

_____
Title of Authorized Representative (*Print*)

Dated:_____

(NOTARY SEAL)

Signed, sealed, and delivered in the presence of:

For the State of Georgia
Environmental Protection Division:

_____ (Seal)
Unofficial Witness *(Signature)*

(Signature)

Richard E. Dunn
Director

_____
Unofficial Witness Name *(Print)*

_____
Unofficial Witness Address *(Print)*

_____ Dated: _____
Notary Public (*Signature*)

(NOTARY SEAL)

My Commission Expires:

_____

Exhibit A

PROPERTY (TRACT 1-1) LEGAL DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND, LYING AND BEING IN THE 8TH GEORGIA MILITIA DISTRICT OF CHATHAM COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT-OF-WAY LINE OF CROSSGATE ROAD (80' RIGHT-OF-WAY) AND THE EASTERLY RIGHT-OF-WAY LINE OF THE SAVANNAH/ATLANTIC RAILROAD (100' RIGHT-OF-WAY), THENCE PROCEED ALONG THE SAID EASTERLY RAILROAD RIGHT-OF-WAY SOUTH 25 DEGREES 46 MINUTES 09 SECOND EAST, A DISTANCE OF 1217.13 FEET TO A 3"X 3" CONCRETE MONUMENT FOUND;

THENCE LEAVING SAID RAILROAD RIGHT-OF-WAY, PROCEED ALONG THE COMMON PROPERTY LINE WITH GEORGIA PORTS AUTHORITY PROPERTY NORTH 79 DEGREES 22 MINUTES 26 SECONDS EAST, A DISTANCE OF 51.97 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE NORTH 25 DEGREES 46 MINUTES 35 SECONDS WEST ALONG SAID GEORGIA PORTS AUTHORITY COMMON LINE A DISTANCE OF 307.78 FEET TO A 3"X 3" CONCRETE MONUMENT FOUND;

THENCE CONTINUE NORTH 77 DEGREES 07 MINUTES 41 SECONDS EAST, ALONG SAID GEORGIA PORTS AUTHORITY COMMON LINE, A DISTANCE OF 685.45 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET, SAID POINT BEING THE POINT OF BEGINNING.

FROM SAID POINT OF BEGINNING, PROCEED ALONG THE COMMON LINE WITH GEORGIA PORTS AUTHORITY PROPERTY NORTH 77 DEGREES 07 MINUTES 41 SECONDS EAST, A DISTANCE OF 1019.95 FEET TO A 3"X 3" CONCRETE MONUMENT FOUND;

THENCE CONTINUE ALONG SAID GEORGIA PORTS COMMON LINE NORTH 12 DEGREES 52 MINUTES 19 SECONDS WEST, A DISTANCE OF 881.50 FEET TO A POINT ON THE COMMON LINE WITH THE SAVANNAH RIVER;

THENCE PROCEED ALONG SAID RIVER SOUTH 67 DEGREES 43 MINUTES 19 SECONDS EAST, A DISTANCE OF 283.60 FEET TO A POINT;

THENCE CONTINUE ALONG SAID RIVER SOUTH 71 DEGREES 42 MINUTES 19 SECONDS EAST, A DISTANCE OF 405.46 FEET TO A POINT;

THENCE LEAVING SAID RIVER PROCEED ALONG A NEW LINE COMMON WITH TRACT 1-3 OF THE PLANT KRAFT SUBDIVISION SOUTH 18 DEGREES 17 MINUTES 29 SECONDS WEST, A DISTANCE OF 148.00 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-3 COMMON LINE SOUTH 72 DEGREES 31 MINUTES 47 SECONDS EAST, A DISTANCE OF 178.90 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-3 COMMON LINE NORTH 47 DEGREES 00 MINUTES 51 SECONDS EAST, A DISTANCE OF 60.00 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-3 COMMON LINE NORTH 18 DEGREES 17 MINUTES 29 SECONDS EAST, A DISTANCE OF 92.80 FEET TO A POINT ON THE COMMON LINE WITH THE SAVANNAH RIVER;

THENCE PROCEED ALONG SAID RIVER LINE SOUTH 71 DEGREES 42 MINUTES 19 SECONDS EAST, DISTANCE OF 98.53 FEET TO A POINT;

THENCE CONTINUE ALONG SAID RIVER LINE SOUTH 58 DEGREES 53 MINUTES 19 SECONDS EAST, A DISTANCE OF 356.37 FEET TO A POINT;

THENCE CONTINUE ALONG SAID RIVER LINE SOUTH 46 DEGREES 27 MINUTES 19 SECONDS EAST, A DISTANCE OF 477.92 FEET TO A POINT;

THENCE CONTINUE ALONG SAID RIVER LINE SOUTH 33 DEGREES 05 MINUTES 19 EAST, A DISTANCE OF 338.85 FEET TO A POINT;

THENCE LEAVING SAID RIVER, PROCEED ALONG A NEW LINE COMMON WITH TRACT 1-2 OF THE PLANT KRAFT SUBDIVISION, SOUTH 71 DEGREES 25 MINUTES 10 SECONDS WEST, A DISTANCE OF 459.75 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-2 COMMON LINE, NORTH 46 DEGREES 39 MINUTES 29 SECONDS WEST, A DISTANCE OF 564.32 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1—2 COMMON LINE, SOUTH 43 DEGREES 20 MINUTES 35 SECONDS WEST, A DISTANCE OF 827.87 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-2 COMMON LINE, SOUTH 77 DEGREES 32 MINUTES 34 SECONDS WEST, A DISTANCE OF 974.63 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

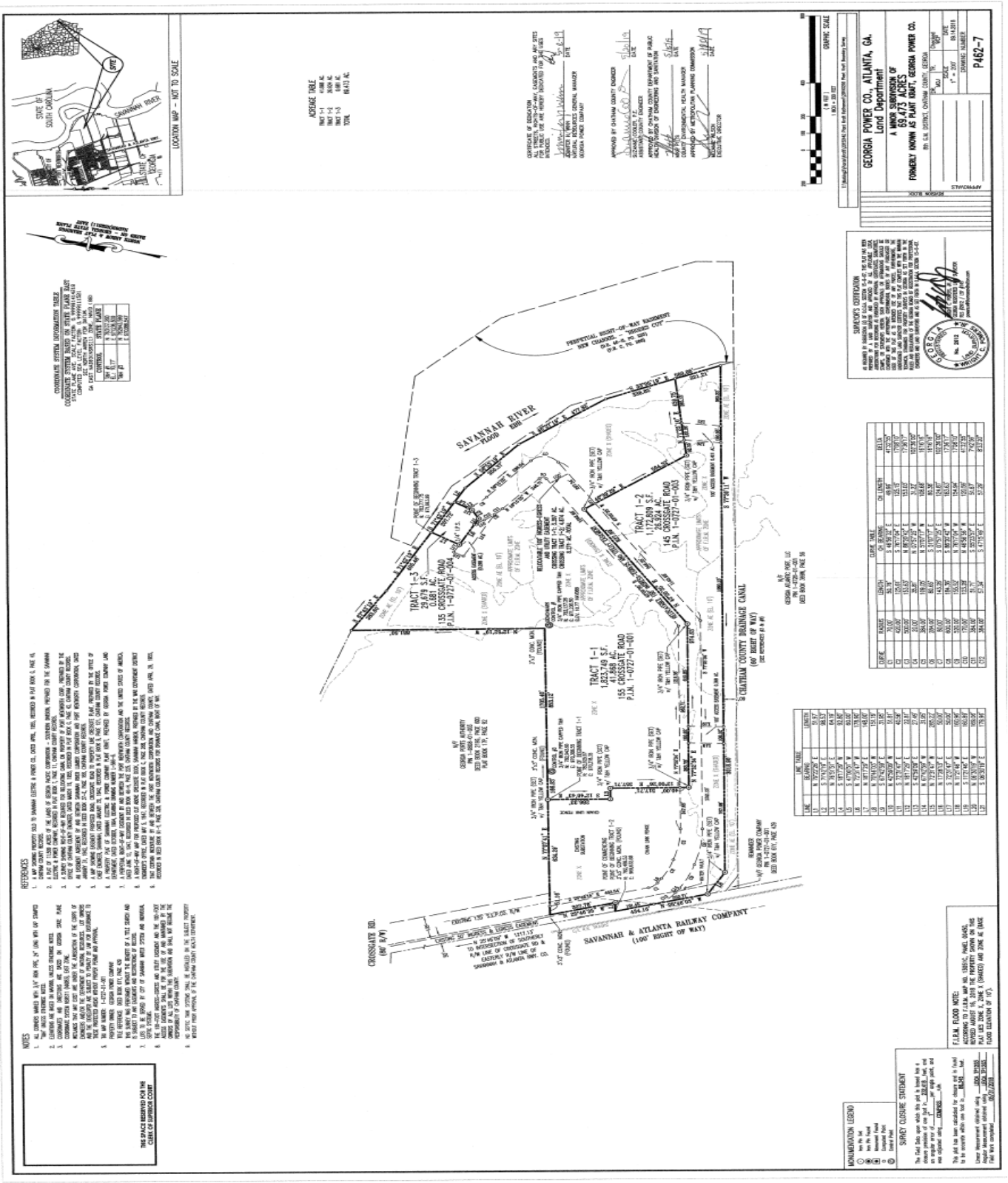
THENCE CONTINUE ALONG SAID TRACT 1-2 COMMON LINE, NORTH 13 DEGREES 00 MINUTES 26 SECONDS WEST, A DISTANCE OF 357.71 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-2 COMMON LINE, SOUTH 76 DEGREES 51 MINUTES 51 SECONDS WEST, A DISTANCE OF 64.19 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID 1-2 COMMON LINE NORTH 12 DEGREES 48 MINUTES 43 SECONDS WEST, A DISTANCE OF 286.33 FEET TO THE POINT OF BEGINNING.

SAID TRACT CONTAINS 41.868 ACRES (1,823,749 SQ. FT.), BEING MORE PARTICULARLY SHOWN AS "TRACT 1-1" ON A SURVEY PLAT PREPARED BY THOMAS AND HUTTON ENGINEERING CO., TITLED "A MINOR SUBDIVISION OF 69.473 ACRES FORMERLY KNOWN AS PLANT KRAFT, GEORGIA POWER COMPANY", DATED se, 2018 AND INCLUDED HEREIN BY REFERENCE.

Exhibit B
Survey of Property – Tract 1-1



After Recording Return to:
Andrea L. Rimer
Troutman Sanders LLP
Suite 3000 Bank of America Plaza
600 Peachtree Street NE
Atlanta, GA 30308

CROSS-REFERENCE:

County: _____
Deed Book: _____
Page(s): _____

Environmental Covenant

This instrument is an Environmental Covenant executed pursuant to the Georgia Uniform Environmental Covenants Act, O.C.G.A. §§ 44-16-1 *et seq.*, as may be amended from time to time (hereinafter "Act"). This Environmental Covenant is entered into by the entities executing this Environmental Covenant and subjects the property identified below to the activity and/or use limitations and other requirements. This Environmental Covenant further grants such other rights in favor of the Georgia Environmental Protection Division ("EPD") and Georgia Power Company as set forth herein.

Fee Simple Owner(s)/Grantor(s):
Georgia Power Company
241 Ralph McGill Blvd. NE
Atlanta, GA 30308-3374

Grantee/Holder with the power to enforce:
Georgia Power Company
241 Ralph McGill Blvd. NE
Atlanta, GA 30308-3374

Grantee/Entity with express power to enforce:
State of Georgia
Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive, SE
Suite 1456 East Tower
Atlanta, GA 30334

Persons with Interests other than Fee Simple:
Atlanta Gas Light Company
c/o Southern Company Gas
10 Peachtree Place NE
Atlanta, GA 30309

Savannah Port Authority
c/o Georgia Ports Authority
PO Box 2406
Savannah, GA 31402

Property Subject

The property subject to this Environmental Covenant consists of a tract of approximately 26.924 acres and a tract of approximately 0.681 acres of real property located at 145 Crossgate Road, Port Wentworth, Chatham County, Georgia, which is further identified by the tax parcel ID number below (hereinafter "Property"). The Property was conveyed to Georgia Power Company by that certain: (i) Warranty Deed from Port Wentworth Corporation to Savannah Electric and Power Company dated April 29, 1955, and recorded in Deed Book 61-Y, Page 439, Chatham County, Georgia Records, (ii) Warranty Deed from Georgia-Pacific Corporation to Savannah Electric and Power Company dated December 13, 1968, and recorded in Deed Book 95-B, Page 127, Chatham County, Georgia Records, and (iii) Certificate of Merger of Savannah Electric and Power Company into Georgia Power Company dated July 1, 2006, and recorded in Deed Book 335-D, Page 511, Chatham County, Georgia Records. The Property is located in the Eighth Georgia Militia District of Chatham County, Georgia.

A legal description of the Property is attached as Exhibit A. A survey performed by a licensed surveyor showing the Property is included as Exhibit B.

Tax Parcel ID

1-0727-01-001, Chatham County, Georgia

Environmental Covenant Runs with the Land and is Perpetual

Pursuant to the Act, this Environmental Covenant shall run with the land and shall be perpetual unless terminated or amended pursuant to terms herein or in accordance with provisions of the Act. This Environmental Covenant shall be binding upon Georgia Power Company and all successors, assigns and transferees of any interest in the Property or any portion thereof.

Administrative Records

This Environmental Covenant imposes activity and/or use limitations and other requirements on the Property that arise under corrective action performed and/or being performed at the Savannah Electric – Plant Kraft HSI Site # 10415. Records pertaining to this corrective action are available at the following EPD location(s):

Georgia Environmental Protection Division
Response and Remediation Program
2 MLK Jr. Drive, SE, Suite 1054 East Tower
Atlanta, GA 30334
Monday-Friday 8:00 AM to 4:30 PM, excluding state holidays

Notice: This Property has been listed on the State's Hazardous Site Inventory at HSI # 10415 and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the Property

owner or the Georgia Environmental Protection Division for further information concerning this Property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

Activity and Use Limitations. The Property is subject to the following activity and/or use limitations:

A. The Property shall be used only as non-residential property as defined in Rule 391-3-19-.02(2)(r). Use of the Property as residential property, as defined in Rule 391-3-10-.02(2)(r), is prohibited.

B. The use or extraction of groundwater beneath the Property for drinking water or for any other non-remedial purposes is prohibited.

Other Requirements. The Property is subject to the following additional requirements:

A. Notice of Limitations and Requirements in Future Conveyances. Each instrument hereafter conveying any interest in the Property or any portion thereof that may affect the activity and use limitations described herein shall include a statement that the Property is subject to this Environmental Covenant (and any amendments thereto), the location (County, Deed Book and Page) in the deed records where this Environmental Covenant (and any amendments thereto) is recorded and a copy of this Environmental Covenant (and any amendments thereto).

B. Notice to EPD of Future Conveyances. Within thirty (30) days after each conveyance of a fee simple interest in the Property or any portion thereof, a notice shall be sent to EPD and Georgia Power Company. The notice shall include the new owner's name, address, telephone number and other pertinent contact information, the date of the conveyance and the location (County, Deed Book and Page) where the conveyance is recorded, and, if the conveyance is a portion of the Property, a survey map showing the boundaries of the real property conveyed.

C. Notice of Change of Use. If such activity will materially affect any required monitoring or maintenance of any institutional or engineering controls described herein, the owner of the Property must provide to EPD thirty (30) days' advance written notice of the owner's intent to change the use of the Property, to apply for a building permit for construction at the Property, or to perform any site work.

Environmental Covenant Does Not Authorize Use Otherwise Prohibited

Pursuant to the Act, this Environmental Covenant shall not be construed to authorize a use of the Property that is otherwise prohibited by zoning, ordinance, local law or general law or by a recorded instrument that has priority over this Environmental Covenant.

Rights of Access and Enforcement

Authorized representatives of EPD and Georgia Power Company shall have the right to enter the Property at reasonable times in connection with implementation, compliance, or enforcement of this Environmental Covenant, including but not limited to the right to conduct inspections, examine related records, or to take samples.

This Environmental Covenant shall be enforceable by EPD, Georgia Power Company and other parties as provided in the Act. Such rights of access and enforcement herein shall not limit EPD's authority under other applicable law.

No Interest in Real Property in EPD

EPD's rights under this Environmental Covenant and the Act shall not be considered an interest in real property.

Recording of Environmental Covenant and Service on Other Persons

Within thirty (30) days after execution of this Environmental Covenant by the Director of EPD, Georgia Power Company shall record the Environmental Covenant in every county in which any portion of the Property is located in accordance with the law governing the recording and priority of interests in real property. Upon recording of the Environmental Covenant, Georgia Power Company shall provide in a manner deemed acceptable by EPD a copy of the executed, recorded Environmental Covenant to each of the persons or entities identified in O.C.G.A. § 44-16-7.

Representations and Warranties by Grantor(s). Georgia Power Company represents and warrants that all of the following are true and correct:

A. Georgia Power Company holds fee simple title to the Property.

B. Georgia Power Company has the authority to enter into this Environmental Covenant, has the authority to grant any rights granted by it within, has the ability to carry out the obligations described within and, based upon information and belief after reasonable inquiry, does not know of any anticipated material change in the practices, ownership, or authority of Georgia Power Company that will alter this representation and warranty.

C. The execution and delivery of this Environmental Covenant and carrying out the obligations described within will not conflict with any of the provisions of the organizational documents, operating agreement of Georgia Power Company nor will it violate, contravene and/or constitute a breach or default under any agreement, contract, order or instrument to which Georgia Power Company is a party or by which Georgia Power Company may be bound.

D. Georgia Power Company has identified all persons with existing interests other than fee simple in the Property and has determined the type and status of their

interests; for those interests where the type and/or status make it necessary, the person's agreement to and signature on this Environmental Covenant or subordination of the interest has been obtained; and the aforementioned information regarding all interests other than fee simple in the Property has been provided to EPD.

E. This Environmental Covenant does not authorize a use of the Property that is otherwise prohibited by zoning, ordinance, local law or general law or by a recorded instrument that has priority over this Environmental Covenant.

F. At least thirty (30) days prior to presenting this Environmental Covenant to EPD for execution, Georgia Power Company served a copy of the proposed final text of this Environmental Covenant on all persons or entities required to be noticed in accordance with O.C.G.A. § 44-16-7.

Submission of Required Documents and Communications

Documents and communications required by this Environmental Covenant shall be submitted to:

Georgia Environmental Protection Division
Branch Chief
Land Protection Branch
2 Martin Luther King Jr. Drive SE
Suite 1054 East Tower
Atlanta, GA 30334

With a copy to:

Georgia Power Company
Attn: VP – Environmental Affairs
Bin 10221
241 Ralph McGill Blvd. NE
Atlanta, GA 30308-3374

EPD's Environmental Covenants Registry

This Environmental Covenant and any amendment thereto or termination thereof may be included in EPD's registry for environmental covenants.

Severability

Should any provision of this Environmental Covenant be found by a court of competent jurisdiction to be invalid and/or unenforceable in any respect, the remaining provisions shall continue in full force and effect.

Effective Date

This Environmental Covenant shall be effective on the date the fully executed Environmental Covenant is recorded in accordance with O.C.G.A. § 44-16-8(a).

Grantor has caused this Environmental Covenant to be executed pursuant to the Georgia Uniform Environmental Covenants Act, on the _____ day of _____, 2019.

Signed, sealed, and delivered in the presence of:

_____
Unofficial Witness (*Signature*)

_____
Unofficial Witness Name (*Print*)

_____
Unofficial Witness Address (*Print*)

_____
Notary Public (*Signature*)

My Commission Expires:

_____

For the Grantor:

Georgia Power Company
Name of Grantor (*Print*)

_____ (Seal)
Grantor's Authorized Representative (*Signature*)

_____
Authorized Representative Name *(Print)*

_____
Title of Authorized Representative (*Print*)

Dated:_____

(NOTARY SEAL)

Signed, sealed, and delivered in the presence of:

For the State of Georgia
Environmental Protection Division:

_____ (Seal)
(Signature)

Richard E. Dunn
Director

_____
Unofficial Witness *(Signature)*

_____
Unofficial Witness Name *(Print)*

_____
Unofficial Witness Address *(Print)*

_____
Notary Public (*Signature*)

Dated: _____

(NOTARY SEAL)

My Commission Expires:

_____

Exhibit A

PROPERTY (TRACTS 1-2 and 1-3) LEGAL DESCRIPTION

TRACT 1-2:

ALL THAT TRACT OR PARCEL OF LAND, LYING AND BEING IN THE 8TH GEORGIA MILITIA DISTRICT OF CHATHAM COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT-OF-WAY LINE OF CROSSGATE ROAD (80' RIGHT-OF-WAY) AND THE EASTERLY RIGHT-OF-WAY LINE OF THE SAVANNAH AND ATLANTIC RAILROAD (100' RIGHT-OF-WAY), THENCE PROCEED ALONG THE SAID EASTERLY RAILROAD RIGHT-OF-WAY SOUTH 25 DEGREES 46 MINUTES 09 SECOND EAST, A DISTANCE OF 1217.13 FEET TO A 3"X 3" CONCRETE MONUMENT FOUND, SAID POINT BEING THE POINT OF BEGINNING.

FROM SAID POINT OF BEGINNING, LEAVE SAID RAILROAD RIGHT-OF-WAY AND PROCEED ALONG THE COMMON PROPERTY LINE WITH GEORGIA PORTS AUTHORITY PROPERTY, NORTH 79 DEGREES 22 MINUTES 26 SECONDS EAST, A DISTANCE OF 51.97 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE NORTH 25 DEGREES 46 MINUTES 35 SECONDS WEST ALONG SAID GEORGIA PORTS AUTHORITY COMMON LINE A DISTANCE OF 307.78 FEET TO A 3"X 3" CONCRETE MONUMENT FOUND;

THENCE CONTINUE NORTH 77 DEGREES 07 MINUTES 41 SECONDS EAST, ALONG SAID GEORGIA PORTS AUTHORITY COMMON LINE, A DISTANCE OF 685.45 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE LEAVING SAID COMMON LINE WITH GEORGIA PORTS AUTHORITY PROPERTY, PROCEED ALONG A NEW LINE COMMON WITH TRACT 1-1 OF THE PLANT KRAFT SUBDIVISION, SOUTH 12 DEGREES 48 MINUTES 43 SECONDS EAST, A DISTANCE OF 286.33 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-1 COMMON LINE, NORTH 76 DEGREES 51 MINUTES 51 SECONDS EAST, A DISTANCE 64.19 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-A COMMON LINE, SOUTH 13 DEGREES 00 MINUTES 26 SECONDS EAST, A DISTANCE OF 357.71 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-1 COMMON LINE, NORTH 77 DEGREES 32 MINUTES 34 SECONDS EAST, A DISTANCE OF 974.63 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-1 COMMON LINE, NORTH 43 DEGREES 20 SECONDS 35 SECONDS EAST, A DISTANCE OF 827.89 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-1 COMMON LINE, SOUTH 46 DEGREES 39 MINUTES 29 SECONDS EAST, A DISTANCE OF 564.32 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-1 COMMON LINE, NORTH 71 DEGREES 25 MINUTES 10 SECONDS EAST, A DISTANCE OF 459.75 FEET TO A POINT ON THE LINE COMMON WITH THE SAVANNAH RIVER;

THENCE PROCEED ALONG THE SAVANNAH RIVER SOUTH 33 DEGREES 05 MINUTES 19 SECONDS EAST, A DISTANCE OF 221.21 FEET TO A POINT ON THE NORTHERN RIGHT-OF-WAY OF CHATHAM COUNTY DRAINAGE CANAL (60' RIGHT-OF-WAY);

THENCE ALONG SAID CANAL RIGHT-OF-WAY, SOUTH 77 DEGREES 30 MINUTES 11 SECONDS WEST, A DISTANCE OF 3,018.90 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE NORTH 70 DEGREES 46 MINUTES 03 SECONDS WEST, A DISTANCE OF 151.19 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET ON THE EASTERN RIGHT-OF-WAY LINE OF THE SAVANNAH AND ATLANTIC RAILROAD (100' RIGHT-OF-WAY);

THENCE PROCEED ALONG SAID RAILROAD RIGHT-OF-WAY NORTH 25 DEGREES 46 MINUTES 03 SECONDS WEST, A DISTANCE OF 434.16 FEET TO THE POINT OF BEGINNING.

SAID TRACT CONTAINS 26.924 ACRES (1,172,809 SQ. FT.), BEING MORE PARTICULARLY SHOWN AS "TRACT 1-2" ON A SURVEY PLAT PREPARED BY THOMAS AND HUTTON ENGINEERING CO., TITLED "A MINOR SUBDIVISION OF 69.473 ACRES FORMERLY KNOWN AS PLANT KRAFT, GEORGIA POWER COMPANY", DATED SEPTEMBER 14, 2018 AND INCLUDED HEREIN BY REFERENCE.

TRACT 1-3:

ALL THAT TRACT OR PARCEL OF LAND, LYING AND BEING IN THE 8TH GEORGIA MILITIA DISTRICT OF CHATHAM COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT-OF-WAY LINE OF CROSSGATE ROAD (80' RIGHT-OF-WAY) AND THE EASTERLY RIGHT-OF-WAY LINE OF THE SAVANNAH/ATLANTIC RAILROAD (100' RIGHT-OF-WAY), THENCE PROCEED ALONG THE SAID EASTERLY RAILROAD RIGHT-OF-WAY SOUTH 25 DEGREES 46 MINUTES 09 SECOND EAST, A DISTANCE OF 1217.13 FEET TO A 3"X 3" CONCRETE MONUMENT FOUND;

THENCE LEAVING SAID RAILROAD RIGHT-OF-WAY, PROCEED ALONG THE COMMON PROPERTY LINE WITH GEORGIA PORTS AUTHORITY PROPERTY NORTH 79 DEGREES 22 MINUTES 26 SECONDS EAST, A DISTANCE OF 51.97 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE NORTH 25 DEGREES 46 MINUTES 35 SECONDS WEST ALONG SAID GEORGIA PORTS AUTHORITY COMMON LINE A DISTANCE OF 307.78 FEET TO A 3"X 3" CONCRETE MONUMENT FOUND;

THENCE CONTINUE NORTH 77 DEGREES 07 MINUTES 41 SECONDS EAST, ALONG SAID GEORGIA PORTS AUTHORITY COMMON LINE, A DISTANCE OF 685.45 FEET TO A 3/4" IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE PROCEED ALONG THE COMMON LINE WITH GEORGIA PORTS AUTHORITY PROPERTY NORTH 77 DEGREES 07 MINUTES 41 SECONDS EAST, A DISTANCE OF 1019.95 FEET TO A 3”X 3” CONCRETE MONUMENT FOUND;

THENCE CONTINUE ALONG SAID GEORGIA PORTS COMMON LINE NORTH 12 DEGREES 52 MINUTES 19 SECONDS WEST, A DISTANCE OF 881.50 FEET TO A POINT ON THE COMMON LINE WITH THE SAVANNAH RIVER;

THENCE PROCEED ALONG SAID RIVER SOUTH 67 DEGREES 43 MINUTES 19 SECONDS EAST, A DISTANCE OF 283.60 FEET TO A POINT;

THENCE CONTINUE ALONG SAID RIVER SOUTH 71 DEGREES 42 MINUTES 19 SECONDS EAST, A DISTANCE OF 405.46 FEET TO A POINT, SAID POINT BEING THE POINT OF BEGINNING.

FROM SAID POINT OF BEGINNING, THENCE LEAVING SAID RIVER, PROCEED ALONG A NEW LINE COMMON WITH TRACT 1-2 OF THE PLANT KRAFT SUBDIVISION SOUTH 18 DEGREES 17 MINUTES 29 SECONDS WEST, A DISTANCE OF 148.00 FEET TO A 3/4” IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-2 COMMON LINE SOUTH 72 DEGREES 31 MINUTES 47 SECONDS EAST, A DISTANCE OF 178.90 FEET TO A 3/4” IRON PIPE WITH A T&H YELLOW CAP SET;

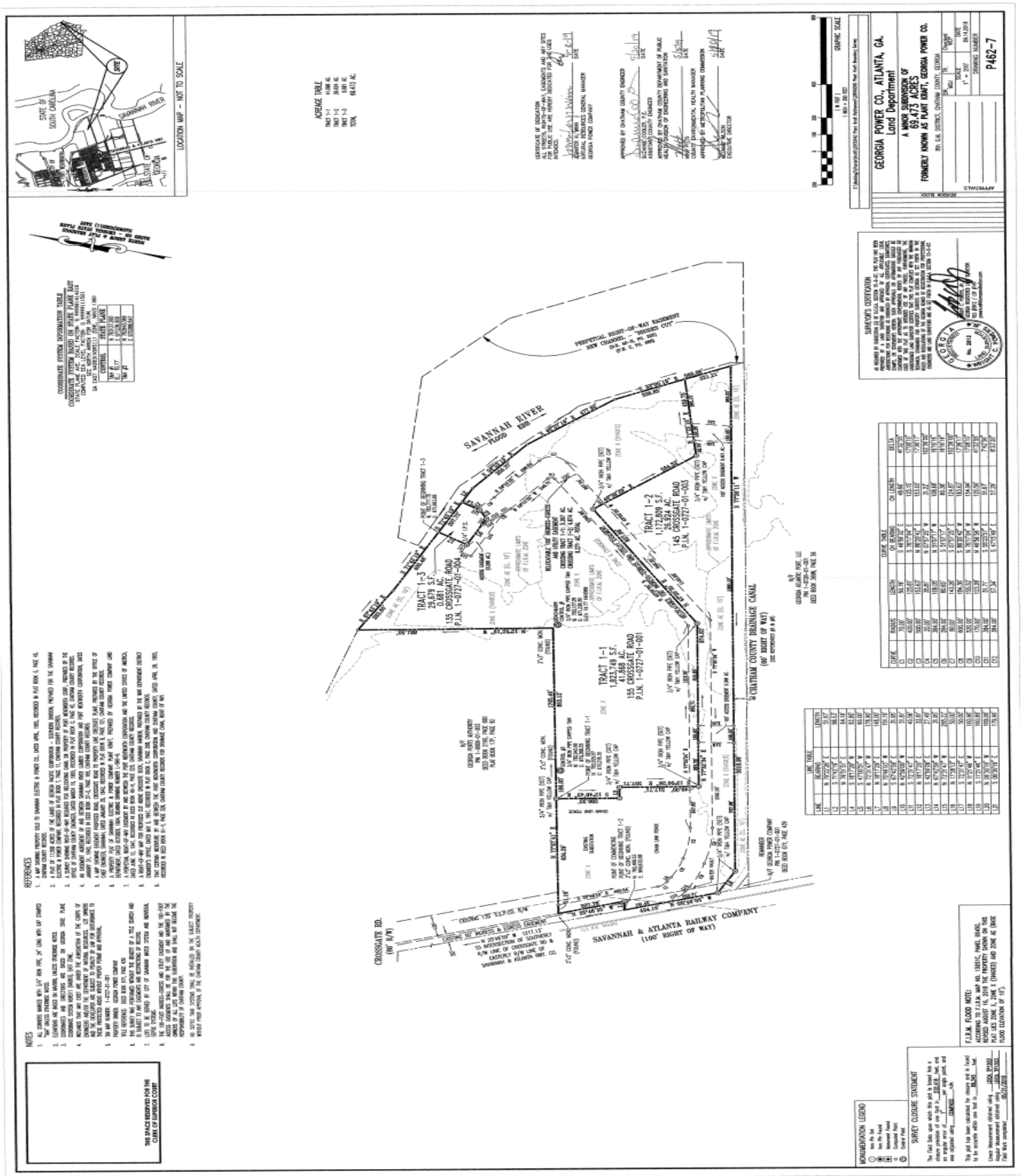
THENCE CONTINUE ALONG SAID TRACT 1-2 COMMON LINE SOUTH 47 DEGREES 00 MINUTES 51 SECONDS WEST, A DISTANCE OF 60.00 FEET TO A 3/4” IRON PIPE WITH A T&H YELLOW CAP SET;

THENCE CONTINUE ALONG SAID TRACT 1-2 COMMON LINE NORTH 18 DEGREES 17 MINUTES 29 SECONDS EAST, A DISTANCE OF 92.80 FEET TO A POINT ON THE COMMON LINE WITH THE SAVANNAH RIVER;

THENCE PROCEED ALONG SAID RIVER LINE NORTH 71 DEGREES 42 MINUTES 19 SECONDS WEST, DISTANCE OF 207.72 FEET TO THE POINT OF BEGINNING;

SAID TRACT CONTAINS 0.681 ACRES (29,679 SQ. FT.), BEING MORE PARTICULARLY SHOWN AS “TRACT 1-3” ON A SURVEY PLAT PREPARED BY THOMAS AND HUTTON ENGINEERING CO., TITLED “A MINOR SUBDIVISION OF 69.473 ACRES FORMERLY KNOWN AS PLANT KRAFT, GEORGIA POWER COMPANY”, DATED SEPTEMBER 14, 2018 AND INCLUDED HEREIN BY REFERENCE.

Exhibit B
Survey of Property – Tract 1-2 and
Tract 1-3



After Recording Return to:
Andrea L. Rimer
Troutman Sanders LLP
Suite 3000 Bank of America Plaza
600 Peachtree Street NE
Atlanta, GA 30308

CROSS-REFERENCE:
County: _____
Deed Book: _____
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Environmental Covenant

This instrument is an Environmental Covenant executed pursuant to the Georgia Uniform Environmental Covenants Act, O.C.G.A. § 44-16-1 *et seq.*, as may be amended from time to time (hereinafter "Act"). This Environmental Covenant is entered into by the entities executing this Environmental Covenant as part of an environmental response project to address regulated substances released into the environment that have migrated in the groundwater onto the Property identified below. This Environmental Covenant restricts the use of groundwater on the Property to prevent humans from coming into contact with regulated substances.

Fee Simple Owner(s)/Grantor(s):
Georgia Ports Authority
PO Box 2406
Savannah, GA 31402

Grantee/Holder with the power to enforce:
Georgia Power Company
241 Ralph McGill Blvd. NE
Atlanta, GA 30308

Grantee/Entity with express power to enforce:
State of Georgia
Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive, SE
Suite 1456 East Tower
Atlanta, GA 30334

Persons with Interests other than Fee Simple:
Atlanta Gas Light Company
c/o Southern Company Gas
10 Peachtree Place NE
Atlanta, GA 30309

Savannah Electric and Power Company
c/o Georgia Power Company
241 Ralph McGill Blvd. NE
Atlanta, GA 30308

Colonial Oil Industries, Inc.
c/o Colonial Group, Inc.
101 N Lathrop Ave
Savannah, GA 31415

Georgia-Pacific Corporation
133 Peachtree Street
Atlanta, GA 30303

Property Subject

The property subject to this Environmental Covenant is a tract of approximately 49.6 acres of real property located at 120 Crossgate Road, Port Wentworth, Chatham County, Georgia, which is further identified by the tax parcel ID number below (hereinafter "Property"). The Property was conveyed on February 27, 2001 from Georgia-Pacific Corporation to the Georgia Ports Authority; such conveyance is recorded in Deed Book 219G, Page 0600. The Property is located in the Eighth Georgia Militia District of Chatham County, Georgia.

A legal description of the Property is attached as Exhibit A. A survey performed by a licensed surveyor showing the Property is included as Exhibit B.

Tax Parcel ID

1-0808-01-003, Chatham County, Georgia

Environmental Covenant Runs with the Land and is Perpetual

Pursuant to the Act, this Environmental Covenant shall run with the land and shall be perpetual unless terminated or amended pursuant to terms herein or in accordance with provisions of the Act. This Environmental Covenant shall be binding upon the Georgia Ports Authority, State of Georgia, Department of Natural Resources, and all successors, assigns and transferees of any interest in the Property or any portion thereof.

Administrative Records

This Environmental Covenant imposes activity and/or use limitations and other requirements on the Property that arise under an environmental response performed and/or being performed at the adjacent Savannah Electric – Plant Kraft HSI Site # 10415. Records pertaining to this corrective action are available at the following EPD location(s):

Georgia Environmental Protection Division
Response and Remediation Program
2 MLK Jr. Drive, SE, Suite 1054 East Tower
Atlanta, GA 30334
Monday-Friday 8:00 AM to 4:30 PM, excluding state holidays

Activity and Use Limitations.

The use or extraction of groundwater beneath the Property for drinking water or other potable uses shall be prohibited. The use or extraction of groundwater for any other purpose besides site characterization is prohibited unless conducted under a plan approved in writing by EPD.

Other Requirements. The Property is subject to the following additional requirements.

A. Notice of Limitations and Requirements in Future Conveyances. Each instrument hereafter conveying any interest in the Property or any portion thereof that may affect the activity and use limitations described herein shall include a statement that the Property is subject to this Environmental Covenant (and any amendments thereto), the location (County, Deed Book and Page) in the deed records where this Environmental Covenant (and any amendments thereto) is recorded.

B. Termination or Modification: The Environmental Covenant shall remain in full force and effect in accordance with O.C.G.A. § 44-5-1 et seq., unless and until the Director determines that the Property is in compliance with the Type 1 or 2 Risk Reduction Standards for groundwater, as defined in Section 391-3-19-.07 of the Georgia Rules of Hazardous Site Response, whereupon the Environmental Covenant may be terminated in accordance with O.C.G.A. § 44-16-1 *et seq*.

Environmental Covenant Does Not Authorize Use Otherwise Prohibited

Pursuant to the Act, this Environmental Covenant shall not be construed to authorize a use of the Property that is otherwise prohibited by zoning, ordinance, local law or general law or by a recorded instrument that has priority over this Environmental Covenant.

Rights of Access/Compliance

Grantor(s) shall provide reasonable access to authorized representatives of EPD and Georgia Power to verify compliance with the terms of this Environmental Covenant.

This Environmental Covenant shall be enforceable by EPD, Georgia Power and other parties as provided in the Act. Such rights of access and enforcement herein shall not limit EPD's authority under other applicable law.

No Interest in Real Property in EPD

EPD's rights under this Environmental Covenant and the Act shall not be considered an interest in real property.

Recording of Environmental Covenant and Service on Other Persons

Within thirty (30) days after execution of this Environmental Covenant by the Director of EPD, the Georgia Ports Authority shall record the Environmental Covenant in every county in which any portion of the Property is located in accordance with the law governing the recording and priority of interests in real property. Upon recording of the Environmental Covenant, the Georgia Ports Authority shall provide in a manner deemed acceptable by EPD a copy of the executed, recorded Environmental Covenant to each of the persons or entities identified in O.C.G.A. § 44-16-7.

Representations and Warranties by Holder

The Georgia Ports Authority represents and warrants that all of the following are true and correct:

A. The Georgia Ports Authority holds fee simple title to the Property.

B. The Georgia Ports Authority has the authority to enter into this Environmental Covenant, has the authority to grant any rights granted by it within, has the ability to carry out the obligations described within and, based upon information and belief after reasonable inquiry, does not know of any anticipated material change in the practices, ownership, or authority of the Georgia Ports Authority that will alter this representation and warranty.

C. The execution and delivery of this Environmental Covenant and carrying out the obligations described within will not conflict with any of the provisions of the organizational documents, operating agreement of the Georgia Ports Authority nor will it violate, contravene and/or constitute a breach or default under any agreement, contract, order or instrument to which the Georgia Ports Authority is a party or by which the Georgia Ports Authority may be bound.

D. The Georgia Ports Authority has identified all persons with existing interests other than fee simple in the Property and has determined the type and status of their interests; for those interests where the type and/or status make it necessary, the person's agreement to and signature on this Environmental Covenant or subordination of the interest has been obtained; and the aforementioned information regarding all interests other than fee simple in the Property has been provided to EPD;

E. At least thirty (30) days prior to presenting this Environmental Covenant to EPD for execution, a copy of the proposed final text of this Environmental Covenant was served on all persons or entities required to be noticed in accordance with O.C.G.A. § 44-16-7.

EPD's Environmental Covenants Registry

This Environmental Covenant and any amendment thereto or termination thereof may be included in EPD's registry for environmental covenants.

Severability

Should any provision of this Environmental Covenant be found by a court of competent jurisdiction to be invalid and/or unenforceable in any respect, the remaining provisions shall continue in full force and effect.

Effective Date

This Environmental Covenant shall be effective on the date the fully executed Environmental Covenant is recorded in accordance with O.C.G.A. § 44-16-8(a).

Grantor has caused this Environmental Covenant to be executed pursuant to The Georgia Uniform Environmental Covenants Act, on the _____ day of _____, 2019.

Signed, sealed, and delivered in the presence of:

_____
Unofficial Witness (*Signature*)

_____
Unofficial Witness Name (*Print*)

_____
Unofficial Witness Address (*Print*)

_____
Notary Public (*Signature*)

My Commission Expires:

_____

For the Grantor:

Georgia Ports Authority
Name of Grantor (*Print*)

_____ (Seal)
Grantor's Authorized Representative (*Signature*)

_____
Authorized Representative Name *(Print)*

_____
Title of Authorized Representative (*Print*)

Dated: _____

(NOTARY SEAL)

Signed, sealed, and delivered in the presence of:

For the Grantee:

_____
Unofficial Witness (*Signature*)

Georgia Power Company
Name of Grantee (*Print*)

_____
Unofficial Witness Name (*Print*)

_____ (Seal)
Grantee's Authorized Representative (*Signature*)

_____
Unofficial Witness Address (*Print*)

_____
Authorized Representative Name *(Print)*

_____
Title of Authorized Representative (*Print*)

_____
Notary Public (*Signature*)

Dated: _____

(NOTARY SEAL)

My Commission Expires:

_____

Signed, sealed, and delivered in the presence of:

For the State of Georgia
Environmental Protection Division:

_____ (Seal)
Unofficial Witness *(Signature)*

(Signature)
Richard E. Dunn
Director

_____
Unofficial Witness Name *(Print)*

_____
Unofficial Witness Address *(Print)*

_____ Dated: _____
Notary Public (*Signature*)

(NOTARY SEAL)

My Commission Expires:
_____

Exhibit A
Property Legal Description

ALL THAT CERTAIN LOT, TRACT AND PARCEL OF LAND SITUATE, LYING AND BEING IN CHATHAM COUNTY, GEORGIA, SHOWN AND DESIGNATED AS LOT 1 OF A SUBDIVISION OF A 81.23+ ACRE PORTION OF THE FORMER POTTER PLANTATION, ACCORDING TO A PLAT PREPARED FOR GEORGIA PACIFIC CORPORATION BY MICHAEL A. HUSSEY, GEORGIA REGISTERED LAND SURVEYOR NO. 2509, AND RECORDED IN PLAT BOOK 17-P, FOLIO 92 IN THE OFFICE OF THE CLERK OF SUPERIOR COURT OF CHATHAM COUNTY, GEORGIA, TO WHICH REFERENCE IS HEREBY MADE FOR A MORE COMPLETE DESCRIPTION.

Exhibit B
Survey of Property

[See attached.]

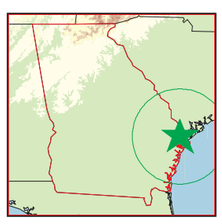
PLAT OF LOT 1
OF A SUBDIVISION OF A (123± ACRE) PORTION
OF THE FORMER POTTEE PLANTATION
BEING A PORTION OF THE LANDS OF
THE GEORGIA PACIFIC CORPORATION
CHATHAM COUNTY, GEORGIA
for
GEORGIA PACIFIC CORPORATION
SCALE: 1" = 200'
DATE: REVISED February 7, 2000
Date: December 7, 2000
17-P92
LOT 1
49.6± ACRES
LOT 2
60' R/W
OSTEEN STREET
CORPORATE ROAD
80' R/W
OLD SAVANNAH AND NORTHWESTERN RAILROAD
50' R/W
SAVANNAH RIVER
BENCHMARK
ELEV. (4.9)
RECEIVED FOR RECORD
Stevenson & Palmer Engineering
INCORPORATED
ENGINEERING A BETTER WORLD
LEGEND
PROPERTYLINE
FENCE
OVERHEAD POWER LINES
RAILROAD TRACKS
UNDERGROUND TELEPHONE
UNDERGROUND WATER
TREE
WATER VALVE
GUARD POSTS
TRANSMISSION TOWER
NORTH MAGNETIC
VICINITY MAP
NOT TO SCALE
PROJECT SITE

APPENDIX N

EDR DataMap® - Well Search

Confidential Site

EDR® Environmental Data Resources Inc



Savannah, GA

- Listed Water Wells
- Study Boundary
- Roads
- Major Roads
- Waterways
- Railroads
- Contour Lines
- Fault Lines
- Water
- Superfund Sites
- 100-Yr Flood Zones
- Wetlands

N

0 1/4 1/2

Scale in Miles

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4380518.10w - 12 Aug 15

Confidential Site
Savannah, GA 31407

Inquiry Number: 4380518.10w
August 12, 2015

EDR DataMap™ Well Search Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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GEOCHECK VERSION 2.1
SUMMARY

FEDERAL DATABASE WELL INFORMATION

MAP ID	WELL ID
2	USGS40000259637
2	USGS40000259635
2	USGS40000259634
5	USGS40000259620
6	USGS40000259614
7	USGS40000259612
8	USGS40000259606
9	USGS40000259604
11	USGS40000259601
12	USGS40000259599
13	USGS40000259587
14	USGS40000259582
15	USGS40000259583

STATE WATER WELL INFORMATION

MAP ID	WELL ID
2	36R008
2	36R010
2	612
6	36R003
6	36R003
9	36R002
9	36R002
11	36R001
11	36R001
14	36R012

PUBLIC WATER SUPPLY SYSTEM INFORMATION

Map ID: 1
PWS ID: GA0510068
PWS Name: GEORGIA PACIFIC-CHEMICALS
GEORGIA PACIFIC CORP. CHEMICAL
POB 4188
PORT WENTWORTH, GA 314074188
PWS currently has or had major violation(s) or enforcement:

Map ID: 3
PWS ID: GA0510002
PWS Name: PORT WENTWORTH
CITY OF PORT WENTWORTH
305 SOUTH COASTAL HIGHWAY
PORT WENTWORTH, GA 31407
PWS currently has or had major violation(s) or enforcement:

GEOCHECK VERSION 2.1
SUMMARY

PUBLIC WATER SUPPLY SYSTEM INFORMATION

Map ID: 4
PWS ID: GA0510002
PWS Name: PORT WENTWORTH
CITY OF PORT WENTWORTH
305 SOUTH COASTAL HIGHWAY
PORT WENTWORTH, GA 31407
PWS currently has or had major violation(s) or enforcement:

Map ID: 10
PWS ID: GA0510268
PWS Name: GA PACIFIC- GA STEAMSHIP CO.
GA PACIFIC-GA STEAMSHIP CO.
4226 CROSSGATE RD
PORT WENTWORTH, GA 31407
PWS currently has or had major violation(s) or enforcement:

Map ID: 16
PWS ID: GA0510258
PWS Name: ATLANTA WOOD INDUSTRIES
ATLANTIC WOOD INDUSTRIES INC.
POB 1608
SAVANNAH, GA 314021608
PWS currently has or had major violation(s) or enforcement:

USGS TOPOGRAPHIC MAP(S)

32081-B2 PORT WENTWORTH, GA SC

AREA RADON INFORMATION

Federal Area Radon Information for Zip Code: 31407

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.700 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

Federal EPA Radon Zone for CHATHAM County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for CHATHAM COUNTY, GA

Number of sites tested: 21

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.881 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported