

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 11/23/2018

GCAL Report 218102709



Project XTO Energy - DeSoto

Deliver To

Brian Strasert
GSI Environmental
2211 Norfolk Street
Suite 1000
Houston, TX 77098
(713) 522-6300

Additional Recipients

James Kearley, GSI Environmental
Whitney Godwin, GSI Environmental



Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
CF	HPLC or GC Confirmation
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

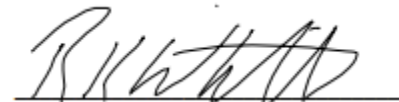
J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	Organics - The result is estimated because it exceeded the instrument calibration range
E	Metals - % difference for the serial dilution is > 10%
L	Reporting Limits adjusted to meet risk-based limit.
P	RPD between primary and confirmation result is greater than 40
DL	Diluted analysis – when appended to Client Sample ID

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.



Authorized Signature
GCAL Report 218102709

Certifications

Certification	Certification Number
DOD ELAP	L16-398-R5
Alabama	01955
Arkansas	18-062-0
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
Washington	C929
USDA Soil Permit	P330-16-00234

Case Narrative

Client: GSI Environmental **Report:** 218102709

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

COC ANOMALIES

1 of 3- 40mL HCL vials for TX1006 analysis was received by the lab broken. Sufficient sample volume remains for the lab to proceed with analysis. (Elizabeth Martin 10/30/2018 07:47)

The lab received 2 containers labeled for Dissolved Metals analysis; however, only 1 container is noted on the COC. Per client email dated Mon 10/29/2018 8:52 AM, the extra metals container can be discarded. (Elizabeth Martin 10/30/2018 07:50)

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis for analytical batch 648685, the LCS and/or LCSD recoveries are outside the control limits for Dichlorodifluoromethane. This compound is defined as a poor performer by the method 8260B.

SEMI-VOLATILES MASS SPECTROMETRY

In the EPA 8270C SIM analysis, there were marginal surrogate recovery failures for sample 21810270901 (Bagley 26H #1) .

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21810270901	Bagley 26H #1	Water	10/25/2018 12:30	10/27/2018 10:35

Summary of Compounds Detected

Bagley 26H #1	Collect Date	10/25/2018 12:30	GCAL ID	21810270901
	Receive Date	10/27/2018 10:35	Matrix	Water

EPA 8260B

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
71-43-2	Benzene	0.00107J	0.000200	0.00500	0.0050	mg/L
75-09-2	Methylene chloride	0.00174J	0.000200	0.00500	0.0050	mg/L
108-88-3	Toluene	0.00997	0.000200	0.00500	1	mg/L

Library Search VOCs

CAS#	Parameter	Result	Retention	Units
	No TICs detected	ND		ug/L

EPA 6020B

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
7440-70-2	Calcium	2.44J	0.63	2.50		mg/L
7439-95-4	Magnesium	0.35J	0.13	0.50		mg/L
7440-09-7	Potassium	1.23	0.13	0.50		mg/L
7440-23-5	Sodium	322	0.13	0.50		mg/L

EPA 6020B Dissolved

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
7440-39-3	Barium	0.022	0.0013	0.0050	2	mg/L
7439-96-5	Manganese	0.012J	0.0063	0.025		mg/L
7440-24-6	Strontium	0.079	0.0013	0.0050		mg/L

EPA 300.0, Rev 2.1

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
16887-00-6	Chloride	103	5.00	20.0		mg/L
14808-79-8	Sulfate	0.515	0.100	0.200		mg/L

Summary of Compounds Detected

Bagley 26H #1	Collect Date	10/25/2018 12:30	GCAL ID	21810270901
	Receive Date	10/27/2018 10:35	Matrix	Water

SM 2320 B-2011

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
T-005-B	Bicarbonate Alkalinity	572	0.26	1.0		mg/L CaCO3

SM 2540 C-2011

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
WET-035	Total Dissolved Solids(TDS)	719	10.0	10.0		mg/L

Sample Results

Bagley 26H #1	Collect Date	10/25/2018 12:30	GCAL ID	21810270901
	Receive Date	10/27/2018 10:35	Matrix	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/09/2018 02:56	BMR	648685

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.000200U	0.000200	0.00500	0.0050	mg/L
71-55-6	1,1,1-Trichloroethane	0.000200U	0.000200	0.00500	0.20	mg/L
79-34-5	1,1,2,2-Tetrachloroethane	0.000200U	0.000200	0.00500	0.0005	mg/L
79-00-5	1,1,2-Trichloroethane	0.000200U	0.000200	0.00500	0.0050	mg/L
75-34-3	1,1-Dichloroethane	0.000200U	0.000200	0.00500	0.0810	mg/L
75-35-4	1,1-Dichloroethene	0.000200U	0.000200	0.00500	0.0070	mg/L
563-58-6	1,1-Dichloropropene	0.000200U	0.000200	0.00500		mg/L
96-18-4	1,2,3-Trichloropropane	0.000200U	0.000200	0.00500		mg/L
120-82-1	1,2,4-Trichlorobenzene	0.000200U	0.000200	0.00500	0.07	mg/L
95-63-6	1,2,4-Trimethylbenzene	0.000200U	0.000200	0.00500		mg/L
96-12-8	1,2-Dibromo-3-chloropropane	0.000200U	0.000200	0.00500	0.0002	mg/L
106-93-4	1,2-Dibromoethane	0.000200U	0.000200	0.00500		mg/L
95-50-1	1,2-Dichlorobenzene	0.000200U	0.000200	0.00500	0.60	mg/L
107-06-2	1,2-Dichloroethane	0.000200U	0.000200	0.00500	0.0050	mg/L
540-59-0	1,2-Dichloroethene(Total)	0.000400U	0.000400	0.010		mg/L
78-87-5	1,2-Dichloropropane	0.000200U	0.000200	0.00500	0.0050	mg/L
108-67-8	1,3,5-Trimethylbenzene	0.000200U	0.000200	0.00500		mg/L
541-73-1	1,3-Dichlorobenzene	0.000200U	0.000200	0.00500	0.01	mg/L
142-28-9	1,3-Dichloropropane	0.000200U	0.000200	0.00500		mg/L
106-46-7	1,4-Dichlorobenzene	0.000200U	0.000200	0.00500	0.0750	mg/L
594-20-7	2,2-Dichloropropane	0.000200U	0.000200	0.00500		mg/L
78-93-3	2-Butanone	0.000200U	0.000200	0.00500	0.19	mg/L
95-49-8	2-Chlorotoluene	0.000200U	0.000200	0.00500		mg/L
591-78-6	2-Hexanone	0.000500U	0.000500	0.00500		mg/L
106-43-4	4-Chlorotoluene	0.000200U	0.000200	0.00500		mg/L
99-87-6	4-Isopropyltoluene	0.000200U	0.000200	0.00500		mg/L
108-10-1	4-Methyl-2-pentanone	0.000200U	0.000200	0.00500	0.20	mg/L
67-64-1	Acetone	0.000500U	0.000500	0.00500	0.10	mg/L
71-43-2	Benzene	0.00107J	0.000200	0.00500	0.0050	mg/L
108-86-1	Bromobenzene	0.000200U	0.000200	0.00500		mg/L
74-97-5	Bromochloromethane	0.000200U	0.000200	0.00500		mg/L
75-27-4	Bromodichloromethane	0.000200U	0.000200	0.00500	0.10	mg/L
75-25-2	Bromoform	0.000250U	0.000250	0.00500	0.10	mg/L
74-83-9	Bromomethane	0.000500U	0.000500	0.00500	0.01	mg/L
75-15-0	Carbon disulfide	0.000200U	0.000200	0.00500	0.10	mg/L
56-23-5	Carbon tetrachloride	0.000250U	0.000250	0.00500	0.0050	mg/L
108-90-7	Chlorobenzene	0.000200U	0.000200	0.00500	0.10	mg/L
75-00-3	Chloroethane	0.000250U	0.000250	0.00500	0.01	mg/L
67-66-3	Chloroform	0.000200U	0.000200	0.00500	0.10	mg/L
74-87-3	Chloromethane	0.000200U	0.000200	0.00500	0.01	mg/L
156-59-2	cis-1,2-Dichloroethene	0.000200U	0.000200	0.00500	0.07	mg/L
10061-01-5	cis-1,3-Dichloropropene	0.000200U	0.000200	0.00500		mg/L
124-48-1	Dibromochloromethane	0.000200U	0.000200	0.00500	0.10	mg/L
74-95-3	Dibromomethane	0.000250U	0.000250	0.00500		mg/L
75-71-8	Dichlorodifluoromethane	0.000200U	0.000200	0.00500		mg/L
100-41-4	Ethylbenzene	0.000200U	0.000200	0.00500	0.70	mg/L
87-68-3	Hexachlorobutadiene	0.000500U	0.000500	0.00500	0.000730	mg/L

Sample Results

Bagley 26H #1	Collect Date	10/25/2018 12:30	GCAL ID	21810270901
	Receive Date	10/27/2018 10:35	Matrix	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch		
NA	NA	NA	1	11/09/2018 02:56	BMR	648685		
CAS#	Parameter			Result	DL	LOQ	Reg Limit	Units
98-82-8	Isopropylbenzene (Cumene)			0.000200U	0.000200	0.00500		mg/L
136777-61-2	m,p-Xylene			0.000200U	0.000200	0.010		mg/L
75-09-2	Methylene chloride			0.00174J	0.000200	0.00500	0.0050	mg/L
91-20-3	Naphthalene			0.000200U	0.000200	0.00500	0.01	mg/L
104-51-8	n-Butylbenzene			0.000200U	0.000200	0.00500		mg/L
103-65-1	n-Propylbenzene			0.00100U	0.00100	0.00500		mg/L
95-47-6	o-Xylene			0.000200U	0.000200	0.00500		mg/L
135-98-8	sec-Butylbenzene			0.000200U	0.000200	0.00500		mg/L
100-42-5	Styrene			0.000200U	0.000200	0.00500	0.10	mg/L
1634-04-4	tert-Butyl methyl ether (MTBE)			0.000200U	0.000200	0.00500	0.02	mg/L
98-06-6	tert-Butylbenzene			0.000200U	0.000200	0.00500		mg/L
127-18-4	Tetrachloroethene			0.000200U	0.000200	0.00500	0.0050	mg/L
108-88-3	Toluene			0.00997	0.000200	0.00500	1	mg/L
156-60-5	trans-1,2-Dichloroethene			0.000200U	0.000200	0.00500	0.10	mg/L
10061-02-6	trans-1,3-Dichloropropene			0.000200U	0.000200	0.00500		mg/L
110-57-6	trans-1,4-Dichloro-2-butene			0.000500U	0.000500	0.00500		mg/L
79-01-6	Trichloroethene			0.000200U	0.000200	0.00500	0.0050	mg/L
75-69-4	Trichlorofluoromethane			0.000200U	0.000200	0.00500	0.13	mg/L
76-13-1	Trichlorotrifluoroethane			0.000200U	0.000200	0.00500		mg/L
75-01-4	Vinyl chloride			0.000200U	0.000200	0.00200	0.0020	mg/L
1330-20-7	Xylene (total)			0.000400U	0.000400	0.015	10	mg/L
CAS#	Surrogate			Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene			0.05	.044	mg/L	88	78 - 130
1868-53-7	Dibromofluoromethane			0.05	.052	mg/L	103	77 - 127
2037-26-5	Toluene d8			0.05	.056	mg/L	112	76 - 134
17060-07-0	1,2-Dichloroethane-d4			0.05	.052	mg/L	104	71 - 127

Sample Results

Bagley 26H #1	Collect Date	10/25/2018 12:30	GCAL ID	21810270901
	Receive Date	10/27/2018 10:35	Matrix	Water

Library Search VOCs

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/09/2018 02:56	BMR	648701

CAS#	Parameter	Result	Retention	Units
	No TICs detected	ND		ug/L

EPA 8270C SIM

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
11/01/2018 13:30	646984	EPA 3510C	1	11/12/2018 10:21	JDF	647889

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
90-12-0	1-Methylnaphthalene	0.040U	0.040	0.100		ug/L
91-57-6	2-Methylnaphthalene	0.040U	0.040	0.100	0.62	ug/L
83-32-9	Acenaphthene	0.013U	0.013	0.100	37	ug/L
208-96-8	Acenaphthylene	0.040U	0.040	0.100	100	ug/L
120-12-7	Anthracene	0.040U	0.040	0.100	43	ug/L
56-55-3	Benzo(a)anthracene	0.025U	0.025	0.100	7.80	ug/L
50-32-8	Benzo(a)pyrene	0.013U	0.013	0.100	0.20	ug/L
205-99-2	Benzo(b)fluoranthene	0.013U	0.013	0.100	4.80	ug/L
191-24-2	Benzo(g,h,i)perylene	0.013U	0.013	0.100		ug/L
207-08-9	Benzo(k)fluoranthene	0.025U	0.025	0.100	2.50	ug/L
218-01-9	Chrysene	0.025U	0.025	0.100	1.60	ug/L
53-70-3	Dibenz(a,h)anthracene	0.025U	0.025	0.100	2.50	ug/L
206-44-0	Fluoranthene	0.013U	0.013	0.100	150	ug/L
86-73-7	Fluorene	0.040U	0.040	0.100	24	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.013U	0.013	0.100	3.70	ug/L
91-20-3	Naphthalene	0.013U	0.013	0.100	10	ug/L
85-01-8	Phenanthrene	0.013U	0.013	0.100	180	ug/L
129-00-0	Pyrene	0.025U	0.025	0.100	18	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	5	3.32	ug/L	66	55 - 111
321-60-8	2-Fluorobiphenyl	5	3.43	ug/L	69	53 - 106
1718-51-0	Terphenyl-d14	5	2.55	ug/L	51*	58 - 132

Texas 1006

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/30/2018 15:20	646922	Texas 1006	1	10/31/2018 14:34	MFS	647206

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
GCSV-02-11	Aliphatic >C10-C12	0.113U	0.113	0.150	0.15	mg/L
GCSV-02-12	Aliphatic >C12-C16	0.131U	0.131	0.150	0.15	mg/L

Sample Results

Bagley 26H #1	Collect Date	10/25/2018 12:30	GCAL ID	21810270901
	Receive Date	10/27/2018 10:35	Matrix	Water

Texas 1006 (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/30/2018 15:20	646922	Texas 1006 (Continued)	1	10/31/2018 14:34	MFS	647206

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
GCSV-02-31	Aliphatic >C16-C35	0.131U	0.131	0.300	7.30	mg/L
GCSV-02-10	Aliphatic >C8-C10	0.113U	0.113	0.300	0.15	mg/L
GCSV-02-30	Aliphatic C6-C8	0.113U	0.113	0.300	3.20	mg/L

Texas 1006

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/30/2018 15:20	646922	Texas 1006	1	10/31/2018 14:34	MFS	647207

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
GCSV-02-63	Aromatic >C10-C12	0.113U	0.113	0.300		mg/L
GCSV-02-64	Aromatic >C12-C16	0.131U	0.131	0.300		mg/L
GCSV-02-65	Aromatic >C16-C21	0.131U	0.131	0.300		mg/L
GCSV-05-18	Aromatic >C21-C35	0.131U	0.131	0.150	0.15	mg/L
GCSV-02-14	Aromatic >C8-C10	0.113U	0.113	0.300	0.15	mg/L
GCSV-05-04	Total TPH (C6-C35)	0.113U	0.113	0.300		mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	15.20	15.9	mg/L	104	60 - 140

EPA 6020B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/29/2018 12:30	646794	EPA 3010A	5	11/05/2018 13:03	LWZ	647366

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
7440-70-2	Calcium	2.44J	0.63	2.50		mg/L
7439-95-4	Magnesium	0.35J	0.13	0.50		mg/L
7440-09-7	Potassium	1.23	0.13	0.50		mg/L
7440-23-5	Sodium	322	0.13	0.50		mg/L

Sample Results

Bagley 26H #1	Collect Date	10/25/2018 12:30	GCAL ID	21810270901
	Receive Date	10/27/2018 10:35	Matrix	Water

EPA 6020B Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/31/2018 13:45	646890	EPA 3005A Dissolved	5	11/05/2018 13:08	LWZ	647366

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
7440-38-2	Arsenic	0.0013U	0.0013	0.0050	0.01	mg/L
7440-39-3	Barium	0.022	0.0013	0.0050	2	mg/L
7440-43-9	Cadmium	0.0013U	0.0013	0.0050	0.0050	mg/L
7440-47-3	Chromium	0.0013U	0.0013	0.0050		mg/L
7439-89-6	Iron	0.13U	0.13	0.50		mg/L
7439-92-1	Lead	0.0013U	0.0013	0.0050	0.0150	mg/L
7439-96-5	Manganese	0.012J	0.0063	0.025		mg/L
7440-24-6	Strontium	0.079	0.0013	0.0050		mg/L
7440-66-6	Zinc	0.025U	0.025	0.10	1.10	mg/L

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/29/2018 11:00	646796	EPA 7470A Dissolved	1	10/30/2018 12:56	LWZ	646905

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
7439-97-6	Mercury	0.00010U	0.00010	0.00020	0.0020	mg/L

EPA 300.0, Rev 2.1

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/31/2018 09:42	AJE	646849

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
14808-79-8	Sulfate	0.515	0.100	0.200		mg/L

EPA 300.0, Rev 2.1

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	10/30/2018 05:46	AJE	646849

CAS#	Parameter	Result	DL	LOQ	Reg Limit	Units
16887-00-6	Chloride	103	5.00	20.0		mg/L

Sample Results

Bagley 26H #1	Collect Date	10/25/2018 12:30	GCAL ID	21810270901
	Receive Date	10/27/2018 10:35	Matrix	Water

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch		
NA	NA	NA	1	11/01/2018 13:58	RYC	647143		
CAS#	Parameter			Result	DL	LOQ	Reg Limit	Units
T-005-B	Bicarbonate Alkalinity			572	0.26	1.0		mg/L CaCO3

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch		
NA	NA	NA	1	11/01/2018 13:58	RYC	647143		
CAS#	Parameter			Result	DL	LOQ	Reg Limit	Units
T-005-C	Carbonate Alkalinity			0.26U	0.26	1.0		mg/L CaCO3

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch		
NA	NA	NA	1	10/30/2018 13:29	CJS	646887		
CAS#	Parameter			Result	DL	LOQ	Reg Limit	Units
WET-035	Total Dissolved Solids(TDS)			719	10.0	10.0		mg/L

GC/MS Volatiles QC Summary

Analytical Batch 648685		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	MB648685 1871997 MB NA 11/09/2018 02:34 Water	LCS648685 1871998 LCS NA 11/08/2018 18:57 Water	LCSD648685 1871999 LCSD NA 11/08/2018 19:20 Water							
EPA 8260B		Units Result	mg/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	0.000200U	0.000200	0.050	0.053	105	75 - 124	0.050	0.052	104	1	30
1,1,1-Trichloroethane	71-55-6	0.000200U	0.000200	0.050	0.049	99	76 - 126	0.050	0.048	96	3	30
1,1,2,2-Tetrachloroethane	79-34-5	0.000200U	0.000200	0.050	0.059	117	70 - 122	0.050	0.059	118	1	30
1,1,2-Trichloroethane	79-00-5	0.000200U	0.000200	0.050	0.048	96	72 - 121	0.050	0.049	99	2	30
1,1-Dichloroethane	75-34-3	0.000200U	0.000200	0.050	0.049	99	74 - 127	0.050	0.047	94	4	30
1,1-Dichloroethene	75-35-4	0.000200U	0.000200	0.050	0.052	103	69 - 129	0.050	0.049	97	6	20
1,1-Dichloropropene	563-58-6	0.000200U	0.000200	0.050	0.050	100	72 - 131	0.050	0.048	96	4	30
1,2,3-Trichloropropane	96-18-4	0.000200U	0.000200	0.050	0.050	100	70 - 120	0.050	0.052	104	4	30
1,2,4-Trichlorobenzene	120-82-1	0.000200U	0.000200	0.050	0.045	90	61 - 135	0.050	0.050	101	11	30
1,2,4-Trimethylbenzene	95-63-6	0.000200U	0.000200	0.050	0.054	108	74 - 125	0.050	0.052	104	4	30
1,2-Dibromo-3-chloropropane	96-12-8	0.000200U	0.000200	0.050	0.041	81	57 - 121	0.050	0.047	93	14	30
1,2-Dibromoethane	106-93-4	0.000200U	0.000200	0.050	0.048	96	70 - 124	0.050	0.050	100	4	30
1,2-Dichlorobenzene	95-50-1	0.000200U	0.000200	0.050	0.053	105	71 - 126	0.050	0.052	103	2	30
1,2-Dichloroethane	107-06-2	0.000200U	0.000200	0.050	0.049	98	71 - 129	0.050	0.048	96	2	30
1,2-Dichloroethene(Total)	540-59-0	0.000400U	0.000400	0.100	0.097	97	74 - 128	0.100	0.095	95	3	30
1,2-Dichloropropane	78-87-5	0.000200U	0.000200	0.050	0.051	103	72 - 128	0.050	0.050	100	2	30
1,3,5-Trimethylbenzene	108-67-8	0.000200U	0.000200	0.050	0.053	105	71 - 132	0.050	0.050	100	5	30
1,3-Dichlorobenzene	541-73-1	0.000200U	0.000200	0.050	0.055	109	74 - 126	0.050	0.053	105	4	30
1,3-Dichloropropane	142-28-9	0.000200U	0.000200	0.050	0.049	98	74 - 122	0.050	0.050	100	2	30
1,4-Dichlorobenzene	106-46-7	0.000200U	0.000200	0.050	0.055	109	72 - 122	0.050	0.054	108	1	30
2,2-Dichloropropane	594-20-7	0.000200U	0.000200	0.050	0.057	115	77 - 124	0.050	0.055	110	4	30
2-Butanone	78-93-3	0.000200U	0.000200	0.050	0.041	83	58 - 137	0.050	0.042	83	1	30
2-Chlorotoluene	95-49-8	0.000200U	0.000200	0.050	0.059	117	72 - 127	0.050	0.056	112	5	30
2-Hexanone	591-78-6	0.000500U	0.000500	0.050	0.037	75	50 - 135	0.050	0.041	82	10	30
4-Chlorotoluene	106-43-4	0.000200U	0.000200	0.050	0.051	102	75 - 126	0.050	0.049	97	5	30
4-Isopropyltoluene	99-87-6	0.000200U	0.000200	0.050	0.056	111	71 - 129	0.050	0.053	106	5	30
4-Methyl-2-pentanone	108-10-1	0.000200U	0.000200	0.050	0.044	88	57 - 132	0.050	0.047	94	7	30
Acetone	67-64-1	0.000500U	0.000500	0.050	0.038	76	44 - 156	0.050	0.039	78	2	30
Benzene	71-43-2	0.000200U	0.000200	0.050	0.054	108	70 - 129	0.050	0.052	104	4	20
Bromobenzene	108-86-1	0.000200U	0.000200	0.050	0.046	91	71 - 120	0.050	0.044	88	3	30
Bromochloromethane	74-97-5	0.000200U	0.000200	0.050	0.052	105	76 - 130	0.050	0.053	106	1	30
Bromodichloromethane	75-27-4	0.000200U	0.000200	0.050	0.053	105	74 - 125	0.050	0.052	104	1	30
Bromoform	75-25-2	0.000250U	0.000250	0.050	0.049	98	64 - 122	0.050	0.050	100	1	30
Bromomethane	74-83-9	0.000500U	0.000500	0.050	0.055	111	47 - 138	0.050	0.053	105	5	30
Carbon disulfide	75-15-0	0.000200U	0.000200	0.050	0.048	96	69 - 136	0.050	0.045	90	7	30
Carbon tetrachloride	56-23-5	0.000250U	0.000250	0.050	0.050	100	76 - 128	0.050	0.047	95	5	30
Chlorobenzene	108-90-7	0.000200U	0.000200	0.050	0.054	107	74 - 123	0.050	0.051	103	4	20
Chloroethane	75-00-3	0.000250U	0.000250	0.050	0.052	105	62 - 141	0.050	0.049	98	6	30
Chloroform	67-66-3	0.000200U	0.000200	0.050	0.052	105	75 - 122	0.050	0.053	106	1	30
Chloromethane	74-87-3	0.000200U	0.000200	0.050	0.037	75	59 - 132	0.050	0.034	68	9	30
cis-1,2-Dichloroethene	156-59-2	0.000200U	0.000200	0.050	0.049	98	73 - 130	0.050	0.048	95	3	30
cis-1,3-Dichloropropene	10061-01-5	0.000200U	0.000200	0.050	0.055	111	71 - 132	0.050	0.054	108	2	30
Dibromochloromethane	124-48-1	0.000200U	0.000200	0.050	0.050	101	71 - 123	0.050	0.052	103	3	30
Dibromomethane	74-95-3	0.000250U	0.000250	0.050	0.052	103	72 - 129	0.050	0.052	104	1	30
Dichlorodifluoromethane	75-71-8	0.000200U	0.000200	0.050	0.023	45*	58 - 140	0.050	0.022	44*	3	30
Ethylbenzene	100-41-4	0.000200U	0.000200	0.050	0.054	109	74 - 126	0.050	0.053	105	3	30
Hexachlorobutadiene	87-68-3	0.000500U	0.000500	0.050	0.052	104	61 - 144	0.050	0.048	97	8	30
Isopropylbenzene (Cumene)	98-82-8	0.000200U	0.000200	0.050	0.058	116	71 - 125	0.050	0.055	110	5	30
m,p-Xylene	136777-61-2	0.000200U	0.000200	0.100	0.113	113	74 - 126	0.100	0.110	110	3	30
Methylene chloride	75-09-2	0.000200U	0.000200	0.050	0.053	106	68 - 132	0.050	0.051	103	3	30
Naphthalene	91-20-3	0.000200U	0.000200	0.050	0.034	69	57 - 138	0.050	0.042	85	21	35
n-Butylbenzene	104-51-8	0.000200U	0.000200	0.050	0.052	105	69 - 134	0.050	0.051	102	2	30
n-Propylbenzene	103-65-1	0.00100U	0.00100	0.050	0.058	116	75 - 129	0.050	0.054	107	8	30
o-Xylene	95-47-6	0.000200U	0.000200	0.050	0.057	114	73 - 130	0.050	0.056	113	1	30
sec-Butylbenzene	135-98-8	0.000200U	0.000200	0.050	0.053	105	70 - 136	0.050	0.049	98	7	30
Styrene	100-42-5	0.000200U	0.000200	0.050	0.059	118	71 - 127	0.050	0.058	116	2	30
tert-Butyl methyl ether (MTBE)	1634-04-4	0.000200U	0.000200	0.050	0.053	106	71 - 125	0.050	0.052	104	2	30
tert-Butylbenzene	98-06-6	0.000200U	0.000200	0.050	0.058	116	72 - 126	0.050	0.054	109	7	30

GC/MS Volatiles QC Summary

Analytical Batch 648685		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	MB648685 1871997 MB NA 11/09/2018 02:34 Water	LCS648685 1871998 LCS NA 11/08/2018 18:57 Water	LCSD648685 1871999 LCSD NA 11/08/2018 19:20 Water							
EPA 8260B		Units Result	mg/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Tetrachloroethene	127-18-4	0.000200U	0.000200	0.050	0.050	100	68 - 128	0.050	0.048	95	5	30
Toluene	108-88-3	0.000200U	0.000200	0.050	0.052	104	72 - 120	0.050	0.051	102	3	20
trans-1,2-Dichloroethene	156-60-5	0.000200U	0.000200	0.050	0.048	96	69 - 132	0.050	0.047	94	3	30
trans-1,3-Dichloropropene	10061-02-6	0.000200U	0.000200	0.050	0.055	110	71 - 131	0.050	0.054	108	2	30
trans-1,4-Dichloro-2-butene	110-57-6	0.000500U	0.000500	0.050	0.037	74	56 - 132	0.050	0.039	79	6	30
Trichloroethene	79-01-6	0.000200U	0.000200	0.050	0.050	100	76 - 129	0.050	0.048	97	3	20
Trichlorofluoromethane	75-69-4	0.000200U	0.000200	0.050	0.046	91	72 - 136	0.050	0.043	86	5	30
Trichlorotrifluoroethane	76-13-1	0.000200U	0.000200	0.050	0.046	92	72 - 136	0.050	0.044	88	5	30
Vinyl chloride	75-01-4	0.000200U	0.000200	0.050	0.041	83	68 - 132	0.050	0.039	78	6	30
Xylene (total)	1330-20-7	0.000400U	0.000400	0.150	0.170	113	74 - 127	0.150	0.166	111	2	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	.0529	106	.05	.0507	101	71 - 127	.05	.052	104	NA	NA
4-Bromofluorobenzene	460-00-4	.0445	89	.05	.0533	107	78 - 130	.05	.0513	103	NA	NA
Dibromofluoromethane	1868-53-7	.0534	107	.05	.0509	102	77 - 127	.05	.0506	101	NA	NA
Toluene d8	2037-26-5	.0535	107	.05	.0502	100	76 - 134	.05	.0494	99	NA	NA

GC/MS Semi-Volatiles QC Summary

Analytical Batch		Client ID	MB646984		LCS646984			LCSD646984				
647889		GCAL ID	1863551		1863552			1863553				
Prep Batch		Sample Type	MB		LCS			LCSD				
646984		Prep Date	11/01/2018 05:30		11/01/2018 05:30			11/01/2018 05:30				
Prep Method		Analysis Date	11/12/2018 08:50		11/12/2018 09:08			11/12/2018 09:26				
EPA 3510C		Matrix	Water		Water			Water				
EPA 8270C SIM		Units	ug/L	Spike	Result	%R	Control	Spike	Result	%R	RPD	RPD
		Result	DL	Added			Limits%R	Added				Limit
1-Methylnaphthalene	90-12-0	0.040U	0.040	5.00	3.63	73	41 - 115	5.00	3.94	79	8	30
2-Methylnaphthalene	91-57-6	0.040U	0.040	5.00	3.44	69	39 - 114	5.00	3.74	75	8	30
Acenaphthene	83-32-9	0.013U	0.013	5.00	3.47	69	48 - 114	5.00	3.83	77	10	30
Acenaphthylene	208-96-8	0.040U	0.040	5.00	3.68	74	35 - 121	5.00	4.05	81	10	30
Anthracene	120-12-7	0.040U	0.040	5.00	3.67	73	53 - 119	5.00	4.01	80	9	30
Benzo(a)anthracene	56-55-3	0.025U	0.025	5.00	3.51	70	59 - 120	5.00	3.83	77	9	30
Benzo(a)pyrene	50-32-8	0.013U	0.013	5.00	3.98	80	53 - 120	5.00	4.30	86	8	30
Benzo(b)fluoranthene	205-99-2	0.013U	0.013	5.00	3.62	72	53 - 126	5.00	4.00	80	10	30
Benzo(g,h,i)perylene	191-24-2	0.013U	0.013	5.00	3.79	76	44 - 128	5.00	4.00	80	5	30
Benzo(k)fluoranthene	207-08-9	0.025U	0.025	5.00	3.73	75	54 - 125	5.00	4.01	80	7	30
Chrysene	218-01-9	0.025U	0.025	5.00	3.75	75	57 - 120	5.00	4.04	81	7	30
Dibenz(a,h)anthracene	53-70-3	0.025U	0.025	5.00	3.59	72	44 - 131	5.00	3.91	78	9	30
Fluoranthene	206-44-0	0.013U	0.013	5.00	3.81	76	58 - 120	5.00	4.18	84	9	30
Fluorene	86-73-7	0.040U	0.040	5.00	3.77	75	50 - 118	5.00	4.14	83	9	30
Indeno(1,2,3-cd)pyrene	193-39-5	0.013U	0.013	5.00	3.41	68	48 - 130	5.00	3.69	74	8	30
Naphthalene	91-20-3	0.013U	0.013	5.00	3.42	68	43 - 114	5.00	3.71	74	8	30
Phenanthrene	85-01-8	0.013U	0.013	5.00	3.69	74	53 - 115	5.00	4.03	81	9	30
Pyrene	129-00-0	0.025U	0.025	5.00	3.71	74	53 - 121	5.00	4.02	80	8	30
Surrogate												
2-Fluorobiphenyl	321-60-8	3.72	74	5	3.48	70	53 - 106	5	3.87	77	NA	NA
Nitrobenzene-d5	4165-60-0	3.78	76	5	3.57	71	55 - 111	5	3.95	79	NA	NA
Terphenyl-d14	1718-51-0	3.93	79	5	3.65	73	58 - 132	5	3.96	79	NA	NA

GC Semi-Volatiles QC Summary

Analytical Batch 647206	Client ID MB646922	GCAL ID 1863255
Prep Batch 646922	Sample Type MB	Prep Date 10/30/2018 15:20
Prep Method Texas 1006	Analysis Date 10/31/2018 11:52	Matrix Water
Texas 1006		Units Result
		mg/L DL
Aliphatic >C10-C12	GCSV-02-11	0.113U 0.113
Aliphatic >C12-C16	GCSV-02-12	0.131U 0.131
Aliphatic >C16-C35	GCSV-02-31	0.131U 0.131
Aliphatic >C8-C10	GCSV-02-10	0.113U 0.113
Aliphatic C6-C8	GCSV-02-30	0.113U 0.113

Analytical Batch 647207	Client ID MB646922	GCAL ID 1863255	LCS646922 1863256	LCSD646922 1863257
Prep Batch 646922	Sample Type MB	Prep Date 10/30/2018 15:20	LCS 10/30/2018 15:20	LCSD 10/30/2018 15:20
Prep Method Texas 1006	Analysis Date 10/31/2018 11:52	Matrix Water	10/31/2018 12:27	10/31/2018 12:55
Texas 1006		Units Result	mg/L DL	Spike Added
				Result
				%R
				Control Limits%R
				Spike Added
				Result
				%R
				RPD
				RPD Limit
Aromatic >C10-C12	GCSV-02-63	0.113U	0.113	
Aromatic >C12-C16	GCSV-02-64	0.131U	0.131	
Aromatic >C16-C21	GCSV-02-65	0.131U	0.131	
Aromatic >C21-C35	GCSV-05-18	0.131U	0.131	
Aromatic >C8-C10	GCSV-02-14	0.113U	0.113	
Total TPH (C6-C35)	GCSV-05-04	0.113U	0.113	64.7
Surrogate o-Terphenyl	84-15-1	17.6	105	65.3
				101
				60 - 140
				65.6
				69.0
				105
				6
				20
				16.4
				14.6
				89
				NA
				NA

Inorganics QC Summary

Analytical Batch 646905	Client ID GCAL ID	MB646796 1862823	LCS646796 1862825				LCS646796 1862824					
Prep Batch 646796	Sample Type Prep Date	MB 10/29/2018 11:00	LCS 10/29/2018 11:00				LCS 10/29/2018 11:00					
Prep Method EPA 7470A	Analysis Date Matrix	10/30/2018 12:14 Water	10/30/2018 12:22 Water				10/30/2018 12:20 Water					
EPA 7470A Dissolved		Units Result	mg/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Mercury	7439-97-6	0.00010U	0.00010	0.0050	0.0044	89	80 - 120	0.0050	0.0043	86	3	20

Analytical Batch 647203	Client ID GCAL ID	MB646794 1862819	LCS646794 1862820				
Prep Batch 646794	Sample Type Prep Date	MB 10/29/2018 12:30	LCS 10/29/2018 12:30				
Prep Method EPA 3010A	Analysis Date Matrix	11/02/2018 12:28 Water	11/02/2018 11:53 Water				
EPA 6020B		Units Result	mg/L DL	Spike Added	Result	%R	Control Limits%R
Calcium	7440-70-2	0.13J	0.13	25.0	24.5	98	80 - 120
Magnesium	7439-95-4	0.025U	0.025	5.00	5.17	103	80 - 120
Potassium	7440-09-7	0.025U	0.025	5.00	4.88	98	80 - 120
Sodium	7440-23-5	0.14	0.025	5.00	5.07	101	80 - 120

Analytical Batch 647203	Client ID GCAL ID	MB646890 1863138	LCS646890 1863139				
Prep Batch 646890	Sample Type Prep Date	MB 10/31/2018 13:45	LCS 10/31/2018 13:45				
Prep Method EPA 3005A Dissolved	Analysis Date Matrix	11/02/2018 12:02 Water	11/02/2018 12:06 Water				
EPA 6020B Dissolved		Units Result	mg/L DL	Spike Added	Result	%R	Control Limits%R
Arsenic	7440-38-2	0.00025U	0.00025	0.050	0.051	103	80 - 120
Barium	7440-39-3	0.00025U	0.00025	0.050	0.049	97	80 - 120
Cadmium	7440-43-9	0.00025U	0.00025	0.050	0.049	97	80 - 120
Chromium	7440-47-3	0.00025U	0.00025	0.050	0.052	103	80 - 120
Iron	7439-89-6	0.025U	0.025	5.00	5.11	102	80 - 120
Lead	7439-92-1	0.00025U	0.00025	0.050	0.048	95	80 - 120
Manganese	7439-96-5	0.0013U	0.0013	0.050	0.050	101	80 - 120
Strontium	7440-24-6	0.00025U	0.00025	0.050	0.048	97	80 - 120
Zinc	7440-66-6	0.0050U	0.0050	1.00	1.01	101	80 - 120

Analytical Batch 647366	Client ID GCAL ID	Bagley 26H #1 21810270901	1862684MS 1864667				1862684MSD 1864668					
Prep Batch 646890	Sample Type Prep Date	SAMPLE 10/31/2018 13:45	MS 10/31/2018 13:45				MSD 10/31/2018 13:45					
Prep Method EPA 3005A Dissolved	Analysis Date Matrix	11/05/2018 13:08 Water	11/05/2018 13:12 Water				11/05/2018 13:17 Water					
EPA 6020B Dissolved		Units Result	mg/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Arsenic	7440-38-2	0.0	0.0013	0.25	0.26	102	80 - 120	0.25	0.25	102	0	20
Barium	7440-39-3	0.022	0.0013	0.25	0.27	100	80 - 120	0.25	0.27	99	1	20
Cadmium	7440-43-9	0.0	0.0013	0.25	0.24	98	80 - 120	0.25	0.25	98	1	20
Chromium	7440-47-3	0.0	0.0013	0.25	0.25	100	80 - 120	0.25	0.25	100	0	20
Iron	7439-89-6	0.0	0.13	25.0	25.3	101	80 - 120	25.0	24.8	99	2	20
Lead	7439-92-1	0.0	0.0013	0.25	0.25	99	80 - 120	0.25	0.25	100	1	20
Manganese	7439-96-5	0.012	0.0063	0.25	0.26	99	80 - 120	0.25	0.25	97	2	20
Strontium	7440-24-6	0.079	0.0013	0.25	0.34	103	80 - 120	0.25	0.34	103	0	20
Zinc	7440-66-6	0.0	0.025	5.00	5.14	103	80 - 120	5.00	5.14	103	0	20

General Chemistry QC Summary

Analytical Batch 646849		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	MB646849 1863014 MB NA 10/30/2018 11:22 Water	LCS646849 1863015 LCS NA 10/30/2018 11:05 Water				
EPA 300.0, Rev 2.1			Units Result	mg/L DL	Spike Added	Result	%R	Control Limits%R
Chloride	16887-00-6	0.071J	0.050	2.50	2.61	105	80 - 120	
Sulfate	14808-79-8	0.100U	0.100	2.50	2.66	106	80 - 120	

Analytical Batch 646887		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	MB646887 1863131 MB NA 10/30/2018 13:29 Water				
SM 2540 C-2011			Units Result	mg/L DL			
Total Dissolved Solids(TDS)	WET-035	ND	10.0				

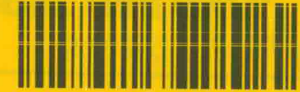


CHAIN OF CUSTODY RECORD

Client ID: 4990 - GSI Environmental

SDG: 218102709

PM: EPM



Report To: Client: <u>GSI Environmental</u> Address: <u>2211 Norfolk St Suite 1000</u> <u>Houston, TX 77018</u> Contact: <u>Whitney Godwin</u> Phone: <u>713-522-6300</u> Email: <u>wgodwin@gcsi-net.com</u>		Bill To: Client: <u>GSI</u> Address: <u>(same)</u> Contact: _____ Phone: _____ Email: _____		Analytical Requests & Method <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">TPH -XRD/6</td> <td style="width:10%;">PAHs</td> <td style="width:10%;">Diss Metals/Hg *</td> <td style="width:10%;">Cu/Sb/AI/Fe/DS</td> <td style="width:10%;">Total Metals -Na, Ca, Mg, P</td> <td style="width:10%;">8260 VOC's/TIC</td> </tr> </table>					TPH -XRD/6	PAHs	Diss Metals/Hg *	Cu/Sb/AI/Fe/DS	Total Metals -Na, Ca, Mg, P	8260 VOC's/TIC	Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: <u>51CPH</u> <u>1.5</u> <u>E21</u>	
TPH -XRD/6	PAHs	Diss Metals/Hg *	Cu/Sb/AI/Fe/DS	Total Metals -Na, Ca, Mg, P	8260 VOC's/TIC											
P.O. Number: <u>4927</u> Project Name/Number: <u>KTO DeSoto</u>		<input checked="" type="checkbox"/> Dissolved Analysis Requested <input checked="" type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered														
Sampled By: <u>W. Godwin</u>																
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers	TPH -XRD/6	PAHs	Diss Metals/Hg *	Cu/Sb/AI/Fe/DS	Total Metals -Na, Ca, Mg, P	8260 VOC's/TIC	Preservative / Notes ↓	GCAL ID		
W	10/25/18	12:30	✓		Bagley 26H #1	3	✓	✓	✓	✓	✓	✓		-1		
Airbill Number: <u>7834-5475-4164</u>																
Turn Around Time (Business Days): <input type="checkbox"/> RUSH* ___ Days <input checked="" type="checkbox"/> Standard (per contract/quote)																
Relinquished by: (Signature) <u>[Signature]</u>		Date/Time: <u>10/26/18 12:30</u>		Received by: (Signature) _____		Date/Time: _____		Notes: _____								
Relinquished by: (Signature) <u>[Signature]</u>		Date/Time: <u>10/27/18</u>		Received by: (Signature) <u>[Signature]</u>		Date/Time: <u>10/27/18 10:55</u>		Notes: _____								
Relinquished by: (Signature) _____		Date/Time: _____		Received by: (Signature) _____		Date/Time: _____		Notes: _____								

¹Matrix: W = Water, S=Solid, L=Liquid, T=Tissue.

*. Requires prior approval, Rush charges may apply.

We cannot accept verbal changes. Please email written changes to your GCAL Project Manager.



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 218102709			CHECKLIST		YES	NO
Client PM EPM 4990 - GSI Environmental	Transport Method FEDEX		Samples received with proper thermal preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
			Radioactivity is <1600 cpm? If no, record cpm value in notes section.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile Number 277552	Received By Savage, Tiffany R		COC relinquished and complete (including sampleIDs, collect times, and sampler)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
			All containers received in good condition and within hold time?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
			All sample labels and containers received match the chain of custody?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Line Item(s) 3 - W - Split	Receive Date(s) 10/27/18		Preservative added to any containers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
			If received, was headspace for VOC water containers < 6mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
			Samples collected in containers provided by GCAL?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
COOLERS			DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E29	Temp °C	None	None		
7834-5475-4164		1.5				
NOTES	Received broken 1 vial (out of 3 vials) for TX1006 analysis. For Dissolved Metals received 2 containers (not 1, per COC)					