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Automated Report

Technical Report for

Hydro-Environmental Technology, Inc.

8060.00 Indigo-Desoto Parish, LA

SGS Job Number: LA55743

Sampling Dates: 06/24/19 - 06/26/19

Report to:

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Total number of pages in report: 168



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Ron Benjamin
Ron Benjamin
Lab Director

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Certifications: LDEQ(2048), LDHH(LA150012), AR(14-045-04), AZ(AZ0805), FL(E87657), IL(200082), KY(#31), NC(487), SC(73004001), NJ(LA007), TX(T104704186-18-16), WV(257)

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Test results relate only to samples analyzed.

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Sample Summary

Hydro-Environmental Technology, Inc.

Job No: LA55743

8060.00 Indigo-Desoto Parish, LA

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
LA55743-1	06/24/19	12:00	06/27/19	AQ	Water	031-262 (MASON WATER WELL)
LA55743-1F	06/24/19	12:00	06/27/19	AQ	Water Filtered	031-262 (MASON WATER WELL)
LA55743-2	06/24/19	17:40	06/27/19	AQ	Water	031-9769Z (BRYANT WATER WELL)
LA55743-2F	06/24/19	17:40	06/27/19	AQ	Water Filtered	031-9769Z (BRYANT WATER WELL)
LA55743-3	06/25/19	09:20	06/27/19	AQ	Water	031-9843Z (PAUL DAVIS WATER WELL)
LA55743-3F	06/25/19	09:20	06/27/19	AQ	Water Filtered	031-9843Z (PAUL DAVIS WATER WELL)
LA55743-4	06/25/19	15:40	06/27/19	AQ	Water	031-9313Z (MCCLARY 235' WATER WELL)
LA55743-4F	06/25/19	15:40	06/27/19	AQ	Water Filtered	031-9313Z (MCCLARY 235' WATER WELL)
LA55743-5	06/25/19	15:50	06/27/19	AQ	Water	031-9435Z (MCCLARY 260' WATER WELL)
LA55743-5F	06/25/19	15:50	06/27/19	AQ	Water Filtered	031-9435Z (MCCLARY 260' WATER WELL)
LA55743-6	06/25/19	16:25	06/27/19	AQ	Water	031-9342Z (MCCLARY 300' WATER WELL)
LA55743-6F	06/25/19	16:25	06/27/19	AQ	Water Filtered	031-9342Z (MCCLARY 300' WATER WELL)
LA55743-7	06/26/19	13:40	06/27/19	AQ	Water	031-5124Z (SMITH WATER WELL)



Sample Summary (continued)

Hydro-Environmental Technology, Inc.

Job No: LA55743

8060.00 Indigo-Desoto Parish, LA

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
LA55743-7F	06/26/19	13:40	06/27/19	AQ	Water Filtered	031-5124Z (SMITH WATER WELL)
LA55743-8	06/24/19	06:30	06/27/19	AQ	Trip Blank Water	TRIP BLANK
LA55743-9	06/24/19	10:25	06/27/19	AQ	Field Blank Water	FIELD BLANK
LA55743-10	06/25/19	07:30	06/27/19	AQ	Field Blank Water	FIELD BLANK
LA55743-11	06/25/19	06:30	06/27/19	AQ	Trip Blank Water	TRIP BLANK
LA55743-12	06/26/19	06:30	06/27/19	AQ	Trip Blank Water	TRIP BLANK
LA55743-13	06/26/19	07:30	06/27/19	AQ	Field Blank Water	FIELD BLANK

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	031-262 (MASON WATER WELL)	Date Sampled:	06/24/19
Lab Sample ID:	LA55743-1	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2I062075.D	1	07/02/19 20:54	CP	n/a	n/a	V2I2248
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031-262 (MASON WATER WELL)	Date Sampled:	06/24/19
Lab Sample ID:	LA55743-1	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	95%		81-120%
2037-26-5	Toluene-D8	100%		93-105%
460-00-4	4-Bromofluorobenzene	98%		89-107%

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031-262 (MASON WATER WELL)	Date Sampled:	06/24/19
Lab Sample ID:	LA55743-1	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0027627.D	1	07/02/19 02:52	AA	06/28/19 06:40	OP14575	EL732
Run #2							

Run #	Initial Volume	Final Volume
Run #1	105 ml	1.0 ml
Run #2		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	0.0048	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0048	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0048	mg/l	
51-28-5	2,4-Dinitrophenol ^a	ND	0.019	mg/l	
100-02-7	4-Nitrophenol	ND	0.024	mg/l	
87-86-5	Pentachlorophenol	ND	0.00095	mg/l	
108-95-2	Phenol	ND	0.0048	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0048	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0048	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0048	mg/l	
83-32-9	Acenaphthene	ND	0.00019	mg/l	
208-96-8	Acenaphthylene	ND	0.00019	mg/l	
62-53-3	Aniline	ND	0.0048	mg/l	
120-12-7	Anthracene	ND	0.00019	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00019	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00019	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00019	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00019	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0095	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0048	mg/l	
106-47-8	4-Chloroaniline	ND	0.0048	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0048	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0048	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0048	mg/l	
218-01-9	Chrysene	ND	0.00019	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00019	mg/l	
132-64-9	Dibenzofuran	ND	0.0048	mg/l	
91-94-1	3,3'-Dichlorobenzidine ^b	ND	0.0095	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0048	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0048	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0048	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0048	mg/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031-262 (MASON WATER WELL)	Date Sampled:	06/24/19
Lab Sample ID:	LA55743-1	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	8060.00 Indigo-Desoto Parish, LA		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	0.0048	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0048	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0048	mg/l	
206-44-0	Fluoranthene	ND	0.00019	mg/l	
86-73-7	Fluorene	ND	0.00019	mg/l	
118-74-1	Hexachlorobenzene	ND	0.00095	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.00048	mg/l	
77-47-4	Hexachlorocyclopentadiene ^a	ND	0.0095	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.00019	mg/l	
78-59-1	Isophorone	ND	0.0048	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.00019	mg/l	
91-20-3	Naphthalene	ND	0.00019	mg/l	
88-74-4	2-Nitroaniline	ND	0.0048	mg/l	
99-09-2	3-Nitroaniline	ND	0.0048	mg/l	
100-01-6	4-Nitroaniline	ND	0.0048	mg/l	
98-95-3	Nitrobenzene	ND	0.00095	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0048	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0048	mg/l	
85-01-8	Phenanthrene	ND	0.00019	mg/l	
129-00-0	Pyrene	ND	0.00019	mg/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.00095	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0048	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	63%		25-101%
4165-62-2	Phenol-d5	50%		17-79%
118-79-6	2,4,6-Tribromophenol	80%		40-144%
4165-60-0	Nitrobenzene-d5	84%		40-124%
321-60-8	2-Fluorobiphenyl	82%		27-124%
1718-51-0	Terphenyl-d14	103%		45-140%

(a) Associated CCV outside control limits low. A sensitivity check was analyzed at the project reporting limit and met 8270D criteria. Sample ND.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-262 (MASON WATER WELL) Lab Sample ID: LA55743-1 Matrix: AQ - Water Method: MADEP VPH REV 1.1 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/24/19 Date Received: 06/27/19 Percent Solids: n/a
---	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043687.D	1	06/29/19 08:15	CP	n/a	n/a	GLC2235
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	0.169	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	119% ^a		70-130%
615-59-8	2,5-Dibromotoluene	111% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-262 (MASON WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-1	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8011 SW846 8011	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM001761.D	1	07/08/19 17:44	PC	07/08/19 15:15	OP14640	GLM43
Run #2							

Run #	Initial Volume	Final Volume
Run #1	34.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.000020mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
348-51-6	1-Chloro-2-fluorobenzene	103%		60-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-262 (MASON WATER WELL) Lab Sample ID: LA55743-1 Matrix: AQ - Water Method: MADEP EPH REV 1.1 SW846 3511 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/24/19 Date Received: 06/27/19 Percent Solids: n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0010351.D	1	07/11/19 16:11	PC	07/02/19 14:00	OP14611	GLB1941
Run #2	Y0010351.D	1	07/11/19 16:12	PC	07/02/19 14:00	OP14611	GLB1942

Run #	Initial Volume	Final Volume
Run #1	53.9 ml	4.0 ml
Run #2	53.9 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND ^a	0.14	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		72%	40-140%
84-15-1	o-Terphenyl	85%		40-140%
321-60-8	2-Fluorobiphenyl	92%		40-140%

(a) Result is from Run# 2

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-262 (MASON WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-1	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.269	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	28.8	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	7.41	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.0966	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	5.69	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	193	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	1.45	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-262 (MASON WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-1	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate ^a	158	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Carbonate ^a	< 5.0	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Total as CaCO ₃ ^a	159	5.0	mg/l	1	07/03/19 15:30	ATX	SM 2320B-2011
Bromide ^a	0.73	0.60	mg/l	1	07/02/19 15:05	ATX	SW846 9056A
Chloride ^a	123	7.0	mg/l	10	07/02/19 15:22	ATX	SW846 9056A
Silica, Dissolved ^a	32.7	0.70	mg/l	10	07/06/19	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved ^a	573	10	mg/l	1	06/28/19	ATX	SM 2540C-2011
Specific Conductivity ^b	925	1.0	umhos/cm	1	07/02/19 18:00	ATX	EPA 120.1
Sulfate ^a	107	5.0	mg/l	10	07/02/19 15:22	ATX	SW846 9056A

(a) Analysis performed at SGS Houston, TX.

(b) Conductivity results corrected to 25 degrees Celsius. Analysis performed at SGS Houston, TX.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-262 (MASON WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-1F	Date Received: 06/27/19
Matrix: AQ - Water Filtered	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.274	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	38.1	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	7.24	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.0851	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	5.85	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	190	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	1.41	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID:	031-9769Z (BRYANT WATER WELL)	Date Sampled:	06/24/19
Lab Sample ID:	LA55743-2	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2I062067.D	1	07/02/19 18:50	CP	n/a	n/a	V2I2248
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9769Z (BRYANT WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-2	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260B	
Project: 8060.00 Indigo-Desoto Parish, LA	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		81-120%
2037-26-5	Toluene-D8	99%		93-105%
460-00-4	4-Bromofluorobenzene	97%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031-9769Z (BRYANT WATER WELL)	Date Sampled:	06/24/19
Lab Sample ID:	LA55743-2	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0027628.D	1	07/02/19 03:17	AA	06/28/19 06:40	OP14575	EL732
Run #2							

Run #	Initial Volume	Final Volume
Run #1	113 ml	1.0 ml
Run #2		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	0.0044	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0044	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0044	mg/l	
51-28-5	2,4-Dinitrophenol ^a	ND	0.018	mg/l	
100-02-7	4-Nitrophenol	ND	0.022	mg/l	
87-86-5	Pentachlorophenol	ND	0.00088	mg/l	
108-95-2	Phenol	ND	0.0044	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0044	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine ^b	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9769Z (BRYANT WATER WELL)	
Lab Sample ID: LA55743-2	Date Sampled: 06/24/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: SW846 8270D SW846 3510C	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	0.0044	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0044	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0044	mg/l	
206-44-0	Fluoranthene	ND	0.00018	mg/l	
86-73-7	Fluorene	ND	0.00018	mg/l	
118-74-1	Hexachlorobenzene	ND	0.00088	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.00044	mg/l	
77-47-4	Hexachlorocyclopentadiene ^a	ND	0.0088	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.00018	mg/l	
78-59-1	Isophorone	ND	0.0044	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.00018	mg/l	
91-20-3	Naphthalene	ND	0.00018	mg/l	
88-74-4	2-Nitroaniline	ND	0.0044	mg/l	
99-09-2	3-Nitroaniline	ND	0.0044	mg/l	
100-01-6	4-Nitroaniline	ND	0.0044	mg/l	
98-95-3	Nitrobenzene	ND	0.00088	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0044	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0044	mg/l	
85-01-8	Phenanthrene	ND	0.00018	mg/l	
129-00-0	Pyrene	ND	0.00018	mg/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.00088	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0044	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	65%		25-101%
4165-62-2	Phenol-d5	52%		17-79%
118-79-6	2,4,6-Tribromophenol	82%		40-144%
4165-60-0	Nitrobenzene-d5	83%		40-124%
321-60-8	2-Fluorobiphenyl	81%		27-124%
1718-51-0	Terphenyl-d14	102%		45-140%

(a) Associated CCV outside control limits low. A sensitivity check was analyzed at the project reporting limit and met 8270D criteria. Sample ND.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9769Z (BRYANT WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-2	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: MADEP VPH REV 1.1	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043664.D	1	06/28/19 20:38	CP	n/a	n/a	GLC2233
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	104% ^a		70-130%
615-59-8	2,5-Dibromotoluene	98% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9769Z (BRYANT WATER WELL) Lab Sample ID: LA55743-2 Matrix: AQ - Water Method: SW846 8011 SW846 8011 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/24/19 Date Received: 06/27/19 Percent Solids: n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM001762.D	1	07/08/19 18:05	PC	07/08/19 15:15	OP14640	GLM43
Run #2							

Run #	Initial Volume	Final Volume
Run #1	34.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.000020mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
348-51-6	1-Chloro-2-fluorobenzene	115%		60-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9769Z (BRYANT WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-2	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: MADEP EPH REV 1.1 SW846 3511	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0010352.D	1	07/11/19 16:35	PC	07/02/19 14:00	OP14611	GLB1941
Run #2	Y0010352.D	1	07/11/19 16:36	PC	07/02/19 14:00	OP14611	GLB1942

Run #	Initial Volume	Final Volume
Run #1	52.4 ml	4.0 ml
Run #2	52.4 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND ^a	0.14	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		61%	40-140%
84-15-1	o-Terphenyl	81%		40-140%
321-60-8	2-Fluorobiphenyl	87%		40-140%

(a) Result is from Run# 2

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9769Z (BRYANT WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-2	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.0639	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	6.82	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	16.4	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	0.0751	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	2.79	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.212	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	1.05	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	20.7	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.0999	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	0.471	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9769Z (BRYANT WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-2	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate ^a	33.0	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Carbonate ^a	< 5.0	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Total as CaCO3 ^a	33.0	5.0	mg/l	1	07/03/19 15:30	ATX	SM 2320B-2011
Bromide ^a	< 0.60	0.60	mg/l	1	07/02/19 15:39	ATX	SW846 9056A
Chloride ^a	9.5	0.70	mg/l	1	07/02/19 15:39	ATX	SW846 9056A
Silica, Dissolved ^a	32.7	0.70	mg/l	10	07/06/19	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved ^a	97.0	10	mg/l	1	06/28/19	ATX	SM 2540C-2011
Specific Conductivity ^b	121	1.0	umhos/cm	1	07/02/19 18:00	ATX	EPA 120.1
Sulfate ^a	4.7	0.50	mg/l	1	07/02/19 15:39	ATX	SW846 9056A

(a) Analysis performed at SGS Houston, TX.

(b) Conductivity results corrected to 25 degrees Celsius. Analysis performed at SGS Houston, TX.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9769Z (BRYANT WATER WELL)	Date Sampled: 06/24/19
Lab Sample ID: LA55743-2F	Date Received: 06/27/19
Matrix: AQ - Water Filtered	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.0573	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	9.20	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	8.89	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	2.89	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.205	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	1.10	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	21.5	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.104	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

(1) Instrument QC Batch: MA16178

(2) Instrument QC Batch: MA16188

(3) Prep QC Batch: MP15655

(4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID:	031-9843Z (PAUL DAVIS WATER WELL)	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-3	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0064586.D	1	06/29/19 16:15	NN	n/a	n/a	V2J1983
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9843Z (PAUL DAVIS WATER WELL)	
Lab Sample ID: LA55743-3	Date Sampled: 06/25/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: SW846 8260B	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		81-120%
2037-26-5	Toluene-D8	93%		93-105%
460-00-4	4-Bromofluorobenzene	96%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031-9843Z (PAUL DAVIS WATER WELL)		Date Sampled:	06/25/19
Lab Sample ID:	LA55743-3		Date Received:	06/27/19
Matrix:	AQ - Water		Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C			
Project:	8060.00 Indigo-Desoto Parish, LA			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0027681.D	1	07/03/19 01:16	AA	07/02/19 03:45	OP14598	EL734
Run #2							

Run #	Initial Volume	Final Volume
Run #1	110 ml	1.0 ml
Run #2		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	0.0045	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0045	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0045	mg/l	
51-28-5	2,4-Dinitrophenol	ND	0.018	mg/l	
100-02-7	4-Nitrophenol	ND	0.023	mg/l	
87-86-5	Pentachlorophenol	ND	0.00091	mg/l	
108-95-2	Phenol	ND	0.0045	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0045	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0045	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0045	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0045	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0091	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0045	mg/l	
106-47-8	4-Chloroaniline	ND	0.0045	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0045	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0045	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0045	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0045	mg/l	
91-94-1	3,3'-Dichlorobenzidine ^a	ND	0.0091	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0045	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0045	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0045	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0045	mg/l	

ND = Not detected

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9843Z (PAUL DAVIS WATER WELL)	
Lab Sample ID: LA55743-3	Date Sampled: 06/25/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: SW846 8270D SW846 3510C	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	0.0045	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0045	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0045	mg/l	
206-44-0	Fluoranthene	ND	0.00018	mg/l	
86-73-7	Fluorene	ND	0.00018	mg/l	
118-74-1	Hexachlorobenzene	ND	0.00091	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.00045	mg/l	
77-47-4	Hexachlorocyclopentadiene ^b	ND	0.0091	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.00018	mg/l	
78-59-1	Isophorone	ND	0.0045	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.00018	mg/l	
91-20-3	Naphthalene	ND	0.00018	mg/l	
88-74-4	2-Nitroaniline	ND	0.0045	mg/l	
99-09-2	3-Nitroaniline	ND	0.0045	mg/l	
100-01-6	4-Nitroaniline	ND	0.0045	mg/l	
98-95-3	Nitrobenzene	ND	0.00091	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0045	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0045	mg/l	
85-01-8	Phenanthrene	ND	0.00018	mg/l	
129-00-0	Pyrene	ND	0.00018	mg/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.00091	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0045	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	65%		25-101%
4165-62-2	Phenol-d5	54%		17-79%
118-79-6	2,4,6-Tribromophenol	87%		40-144%
4165-60-0	Nitrobenzene-d5	87%		40-124%
321-60-8	2-Fluorobiphenyl	80%		27-124%
1718-51-0	Terphenyl-d14	99%		45-140%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside control limits low. A sensitivity check was analyzed at the project reporting limit and met 8270D criteria. Sample ND.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9843Z (PAUL DAVIS WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-3	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: MADEP VPH REV 1.1	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043663.D	1	06/28/19 20:07	CP	n/a	n/a	GLC2233
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	98% ^a		70-130%
615-59-8	2,5-Dibromotoluene	93% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9843Z (PAUL DAVIS WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-3	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8011 SW846 8011	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM001763.D	1	07/08/19 18:26	PC	07/08/19 15:15	OP14640	GLM43
Run #2							

Run #	Initial Volume	Final Volume
Run #1	35.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020mg/l		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
348-51-6	1-Chloro-2-fluorobenzene	104%		60-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9843Z (PAUL DAVIS WATER WELL) Lab Sample ID: LA55743-3 Matrix: AQ - Water Method: MADEP EPH REV 1.1 SW846 3511 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/25/19 Date Received: 06/27/19 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0010353.D	1	07/11/19 16:58	PC	07/02/19 14:00	OP14611	GLB1941
Run #2	Y0010353.D	1	07/11/19 16:59	PC	07/02/19 14:00	OP14611	GLB1942

Run #	Initial Volume	Final Volume
Run #1	53.8 ml	4.0 ml
Run #2	53.8 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND ^a	0.14	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		79%	40-140%
84-15-1	o-Terphenyl	87%		40-140%
321-60-8	2-Fluorobiphenyl	97%		40-140%

(a) Result is from Run# 2

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9843Z (PAUL DAVIS WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-3	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.0812	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	7.69	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	2.39	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.0314	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	2.90	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	199	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.439	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	0.0835	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9843Z (PAUL DAVIS WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-3	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate ^a	184	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Carbonate ^a	< 5.0	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Total as CaCO3 ^a	186	5.0	mg/l	1	07/03/19 15:30	ATX	SM 2320B-2011
Bromide ^a	< 0.60	0.60	mg/l	1	07/02/19 17:03	ATX	SW846 9056A
Chloride ^a	57.6	3.5	mg/l	5	07/02/19 17:20	ATX	SW846 9056A
Silica, Dissolved ^a	14.0	0.70	mg/l	10	07/06/19	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved ^a	434	10	mg/l	1	06/28/19	ATX	SM 2540C-2011
Specific Conductivity ^b	728	1.0	umhos/cm	1	07/02/19 18:00	ATX	EPA 120.1
Sulfate ^a	51.1	2.5	mg/l	5	07/02/19 17:20	ATX	SW846 9056A

(a) Analysis performed at SGS Houston, TX.

(b) Conductivity results corrected to 25 degrees Celsius. Analysis performed at SGS Houston, TX.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9843Z (PAUL DAVIS WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-3F	Date Received: 06/27/19
Matrix: AQ - Water Filtered	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.0851	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	7.97	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	2.43	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.0228	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	3.06	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	208	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.463	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID:	031-9313Z (MCCLARY 235' WATER WELL)	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-4	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2I062069.D	1	07/02/19 19:21	CP	n/a	n/a	V2I2248
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9313Z (MCCLARY 235' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-4	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260B	
Project: 8060.00 Indigo-Desoto Parish, LA	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		81-120%
2037-26-5	Toluene-D8	99%		93-105%
460-00-4	4-Bromofluorobenzene	97%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031-9313Z (MCCLARY 235' WATER WELL)	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-4	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0027682.D	1	07/03/19 01:40	AA	07/02/19 03:45	OP14598	EL734
Run #2							

Run #	Initial Volume	Final Volume
Run #1	107 ml	1.0 ml
Run #2		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	0.0047	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0047	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0047	mg/l	
51-28-5	2,4-Dinitrophenol	ND	0.019	mg/l	
100-02-7	4-Nitrophenol	ND	0.023	mg/l	
87-86-5	Pentachlorophenol	ND	0.00093	mg/l	
108-95-2	Phenol	ND	0.0047	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0047	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0047	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0047	mg/l	
83-32-9	Acenaphthene	ND	0.00019	mg/l	
208-96-8	Acenaphthylene	ND	0.00019	mg/l	
62-53-3	Aniline	ND	0.0047	mg/l	
120-12-7	Anthracene	ND	0.00019	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00019	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00019	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00019	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00019	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0093	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0047	mg/l	
106-47-8	4-Chloroaniline	ND	0.0047	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0047	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0047	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0047	mg/l	
218-01-9	Chrysene	ND	0.00019	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00019	mg/l	
132-64-9	Dibenzofuran	ND	0.0047	mg/l	
91-94-1	3,3'-Dichlorobenzidine ^a	ND	0.0093	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0047	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0047	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0047	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0047	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9313Z (MCCLARY 235' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-4	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8270D SW846 3510C	
Project: 8060.00 Indigo-Desoto Parish, LA	

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	0.0047	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0047	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0047	mg/l	
206-44-0	Fluoranthene	ND	0.00019	mg/l	
86-73-7	Fluorene	ND	0.00019	mg/l	
118-74-1	Hexachlorobenzene	ND	0.00093	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.00047	mg/l	
77-47-4	Hexachlorocyclopentadiene ^b	ND	0.0093	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.00019	mg/l	
78-59-1	Isophorone	ND	0.0047	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.00019	mg/l	
91-20-3	Naphthalene	ND	0.00019	mg/l	
88-74-4	2-Nitroaniline	ND	0.0047	mg/l	
99-09-2	3-Nitroaniline	ND	0.0047	mg/l	
100-01-6	4-Nitroaniline	ND	0.0047	mg/l	
98-95-3	Nitrobenzene	ND	0.00093	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0047	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0047	mg/l	
85-01-8	Phenanthrene	ND	0.00019	mg/l	
129-00-0	Pyrene	ND	0.00019	mg/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.00093	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0047	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	71%		25-101%
4165-62-2	Phenol-d5	60%		17-79%
118-79-6	2,4,6-Tribromophenol	97%		40-144%
4165-60-0	Nitrobenzene-d5	98%		40-124%
321-60-8	2-Fluorobiphenyl	91%		27-124%
1718-51-0	Terphenyl-d14	113%		45-140%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside control limits low. A sensitivity check was analyzed at the project reporting limit and met 8270D criteria. Sample ND.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9313Z (MCCLARY 235' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-4	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: MADEP VPH REV 1.1	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043669.D	1	06/28/19 23:08	CP	n/a	n/a	GLC2233
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	104% ^a		70-130%
615-59-8	2,5-Dibromotoluene	98% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9313Z (MCCLARY 235' WATER WELL) Lab Sample ID: LA55743-4 Matrix: AQ - Water Method: SW846 8011 SW846 8011 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/25/19 Date Received: 06/27/19 Percent Solids: n/a
--	---

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM001764.D	1	07/08/19 18:46	PC	07/08/19 15:15	OP14640	GLM43
Run #2							

	Initial Volume	Final Volume
Run #1	35.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.000020mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
348-51-6	1-Chloro-2-fluorobenzene	105%		60-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9313Z (MCCLARY 235' WATER WELL) Lab Sample ID: LA55743-4 Matrix: AQ - Water Method: MADEP EPH REV 1.1 SW846 3511 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/25/19 Date Received: 06/27/19 Percent Solids: n/a
---	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0010354.D	1	07/11/19 17:21	PC	07/02/19 14:00	OP14611	GLB1941
Run #2	Y0010354.D	1	07/11/19 17:22	PC	07/02/19 14:00	OP14611	GLB1942

Run #	Initial Volume	Final Volume
Run #1	52.7 ml	4.0 ml
Run #2	52.7 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND ^a	0.14	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		48%	40-140%
84-15-1	o-Terphenyl	89%		40-140%
321-60-8	2-Fluorobiphenyl	94%		40-140%

(a) Result is from Run# 2

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9313Z (MCCLARY 235' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-4	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.0353	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	1.08	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.0242	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	1.21	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	271	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.0659	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9313Z (MCCLARY 235' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-4	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate ^a	334	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Carbonate ^a	5.9	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Total as CaCO3 ^a	340	5.0	mg/l	1	07/03/19 15:30	ATX	SM 2320B-2011
Bromide ^a	< 0.60	0.60	mg/l	1	07/02/19 17:37	ATX	SW846 9056A
Chloride ^a	58.0	3.5	mg/l	5	07/02/19 17:54	ATX	SW846 9056A
Silica, Dissolved ^a	11.4	0.70	mg/l	10	07/06/19	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved ^a	587	10	mg/l	1	06/28/19	ATX	SM 2540C-2011
Specific Conductivity ^b	938	1.0	umhos/cm	1	07/02/19 18:00	ATX	EPA 120.1
Sulfate ^a	0.54	0.50	mg/l	1	07/02/19 17:37	ATX	SW846 9056A

(a) Analysis performed at SGS Houston, TX.

(b) Conductivity results corrected to 25 degrees Celsius. Analysis performed at SGS Houston, TX.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9313Z (MCCLARY 235' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-4F	Date Received: 06/27/19
Matrix: AQ - Water Filtered	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.0161	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	< 0.020	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	1.27	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	304	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.0545	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY 260' WATER WELL)	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-5	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2I062073.D	1	07/02/19 20:23	CP	n/a	n/a	V2I2248
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9435Z (MCCLARY 260' WATER WELL)	
Lab Sample ID: LA55743-5	Date Sampled: 06/25/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: SW846 8260B	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		81-120%
2037-26-5	Toluene-D8	98%		93-105%
460-00-4	4-Bromofluorobenzene	95%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY 260' WATER WELL)	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-5	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0027683.D	1	07/03/19 02:05	AA	07/02/19 03:45	OP14598	EL734
Run #2							

Run #	Initial Volume	Final Volume
Run #1	113 ml	1.0 ml
Run #2		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	0.0044	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0044	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0044	mg/l	
51-28-5	2,4-Dinitrophenol	ND	0.018	mg/l	
100-02-7	4-Nitrophenol	ND	0.022	mg/l	
87-86-5	Pentachlorophenol	ND	0.00088	mg/l	
108-95-2	Phenol	ND	0.0044	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0044	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine ^a	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9435Z (MCCLARY 260' WATER WELL)	
Lab Sample ID: LA55743-5	Date Sampled: 06/25/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: SW846 8270D SW846 3510C	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	0.0044	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0044	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0044	mg/l	
206-44-0	Fluoranthene	ND	0.00018	mg/l	
86-73-7	Fluorene	ND	0.00018	mg/l	
118-74-1	Hexachlorobenzene	ND	0.00088	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.00044	mg/l	
77-47-4	Hexachlorocyclopentadiene ^b	ND	0.0088	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.00018	mg/l	
78-59-1	Isophorone	ND	0.0044	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.00018	mg/l	
91-20-3	Naphthalene	ND	0.00018	mg/l	
88-74-4	2-Nitroaniline	ND	0.0044	mg/l	
99-09-2	3-Nitroaniline	ND	0.0044	mg/l	
100-01-6	4-Nitroaniline	ND	0.0044	mg/l	
98-95-3	Nitrobenzene	ND	0.00088	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0044	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0044	mg/l	
85-01-8	Phenanthrene	ND	0.00018	mg/l	
129-00-0	Pyrene	ND	0.00018	mg/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.00088	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0044	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		25-101%
4165-62-2	Phenol-d5	52%		17-79%
118-79-6	2,4,6-Tribromophenol	84%		40-144%
4165-60-0	Nitrobenzene-d5	85%		40-124%
321-60-8	2-Fluorobiphenyl	78%		27-124%
1718-51-0	Terphenyl-d14	103%		45-140%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside control limits low. A sensitivity check was analyzed at the project reporting limit and met 8270D criteria. Sample ND.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9435Z (MCCLARY 260' WATER WELL) Lab Sample ID: LA55743-5 Matrix: AQ - Water Method: MADEP VPH REV 1.1 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/25/19 Date Received: 06/27/19 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043670.D	1	06/28/19 23:38	CP	n/a	n/a	GLC2233
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	104% ^a		70-130%
615-59-8	2,5-Dibromotoluene	99% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9435Z (MCCLARY 260' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-5	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8011 SW846 8011	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM001765.D	1	07/08/19 19:06	PC	07/08/19 15:15	OP14640	GLM43
Run #2							

Run #	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.000020mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
348-51-6	1-Chloro-2-fluorobenzene	106%		60-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9435Z (MCCLARY 260' WATER WELL) Lab Sample ID: LA55743-5 Matrix: AQ - Water Method: MADEP EPH REV 1.1 SW846 3511 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/25/19 Date Received: 06/27/19 Percent Solids: n/a
---	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0010355.D	1	07/11/19 17:44	PC	07/02/19 14:00	OP14611	GLB1941
Run #2	Y0010355.D	1	07/11/19 17:45	PC	07/02/19 14:00	OP14611	GLB1942

Run #	Initial Volume	Final Volume
Run #1	54.1 ml	4.0 ml
Run #2	54.1 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND ^a	0.14	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		73%	40-140%
84-15-1	o-Terphenyl	80%		40-140%
321-60-8	2-Fluorobiphenyl	85%		40-140%

(a) Result is from Run# 2

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9435Z (MCCLARY 260' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-5	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.0210	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	1.50	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	< 0.020	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	1.23	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	322	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.0687	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9435Z (MCCLARY 260' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-5	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate ^a	391	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Carbonate ^a	13	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Total as CaCO3 ^a	405	5.0	mg/l	1	07/03/19 15:30	ATX	SM 2320B-2011
Bromide ^a	< 0.60	0.60	mg/l	1	07/02/19 18:11	ATX	SW846 9056A
Chloride ^a	74.7	3.5	mg/l	5	07/02/19 18:28	ATX	SW846 9056A
Silica, Dissolved ^a	12.0	0.70	mg/l	10	07/06/19	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved ^a	675	10	mg/l	1	06/28/19	ATX	SM 2540C-2011
Specific Conductivity ^b	1110	1.0	umhos/cm	1	07/02/19 18:00	ATX	EPA 120.1
Sulfate ^a	< 0.50	0.50	mg/l	1	07/02/19 18:11	ATX	SW846 9056A

(a) Analysis performed at SGS Houston, TX.

(b) Conductivity results corrected to 25 degrees Celsius. Analysis performed at SGS Houston, TX.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9435Z (MCCLARY 260' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-5F	Date Received: 06/27/19
Matrix: AQ - Water Filtered	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.0186	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	1.38	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	< 0.020	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	1.35	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	360	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.0712	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID:	031-9342Z (MCCLARY 300' WATER WELL)	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-6	Date Received:	06/27/19
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2I062071.D	1	07/02/19 19:52	CP	n/a	n/a	V2I2248
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	0.0015	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9342Z (MCCLARY 300' WATER WELL)	
Lab Sample ID: LA55743-6	Date Sampled: 06/25/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: SW846 8260B	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		81-120%
2037-26-5	Toluene-D8	101%		93-105%
460-00-4	4-Bromofluorobenzene	94%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9342Z (MCCLARY 300' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-6	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8270D SW846 3510C	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0027684.D	1	07/03/19 02:29	AA	07/02/19 03:45	OP14598	EL734
Run #2							

Run #	Initial Volume	Final Volume
Run #1	102 ml	1.0 ml
Run #2		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	0.0049	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0049	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0049	mg/l	
51-28-5	2,4-Dinitrophenol	ND	0.020	mg/l	
100-02-7	4-Nitrophenol	ND	0.025	mg/l	
87-86-5	Pentachlorophenol	ND	0.00098	mg/l	
108-95-2	Phenol	ND	0.0049	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0049	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0049	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0049	mg/l	
83-32-9	Acenaphthene	ND	0.00020	mg/l	
208-96-8	Acenaphthylene	ND	0.00020	mg/l	
62-53-3	Aniline	ND	0.0049	mg/l	
120-12-7	Anthracene	ND	0.00020	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00020	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00020	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00020	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00020	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0098	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0049	mg/l	
106-47-8	4-Chloroaniline	ND	0.0049	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0049	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0049	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0049	mg/l	
218-01-9	Chrysene	ND	0.00020	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00020	mg/l	
132-64-9	Dibenzofuran	ND	0.0049	mg/l	
91-94-1	3,3'-Dichlorobenzidine ^a	ND	0.0098	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0049	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0049	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0049	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0049	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9342Z (MCCLARY 300' WATER WELL)	
Lab Sample ID: LA55743-6	Date Sampled: 06/25/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: SW846 8270D SW846 3510C	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	0.0049	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0049	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0049	mg/l	
206-44-0	Fluoranthene	ND	0.00020	mg/l	
86-73-7	Fluorene	ND	0.00020	mg/l	
118-74-1	Hexachlorobenzene	ND	0.00098	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.00049	mg/l	
77-47-4	Hexachlorocyclopentadiene ^b	ND	0.0098	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.00020	mg/l	
78-59-1	Isophorone	ND	0.0049	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.00020	mg/l	
91-20-3	Naphthalene	ND	0.00020	mg/l	
88-74-4	2-Nitroaniline	ND	0.0049	mg/l	
99-09-2	3-Nitroaniline	ND	0.0049	mg/l	
100-01-6	4-Nitroaniline	ND	0.0049	mg/l	
98-95-3	Nitrobenzene	ND	0.00098	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0049	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0049	mg/l	
85-01-8	Phenanthrene	ND	0.00020	mg/l	
129-00-0	Pyrene	ND	0.00020	mg/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.00098	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0049	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		25-101%
4165-62-2	Phenol-d5	59%		17-79%
118-79-6	2,4,6-Tribromophenol	86%		40-144%
4165-60-0	Nitrobenzene-d5	92%		40-124%
321-60-8	2-Fluorobiphenyl	79%		27-124%
1718-51-0	Terphenyl-d14	105%		45-140%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside control limits low. A sensitivity check was analyzed at the project reporting limit and met 8270D criteria. Sample ND.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9342Z (MCCLARY 300' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-6	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: MADEP VPH REV 1.1	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043820.D	1	07/01/19 19:48	NN	n/a	n/a	GLC2239
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	94% ^a		70-130%
615-59-8	2,5-Dibromotoluene	87% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9342Z (MCCLARY 300' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-6	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8011 SW846 8011	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM001767.D	1	07/08/19 19:45	PC	07/08/19 15:15	OP14640	GLM43
Run #2							

Run #	Initial Volume	Final Volume
Run #1	35.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
348-51-6	1-Chloro-2-fluorobenzene	109%		60-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9342Z (MCCLARY 300' WATER WELL) Lab Sample ID: LA55743-6 Matrix: AQ - Water Method: MADEP EPH REV 1.1 SW846 3511 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/25/19 Date Received: 06/27/19 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0010356.D	1	07/11/19 18:07	PC	07/02/19 14:00	OP14611	GLB1941
Run #2	Y0010356.D	1	07/11/19 18:08	PC	07/02/19 14:00	OP14611	GLB1942

Run #	Initial Volume	Final Volume
Run #1	52.7 ml	4.0 ml
Run #2	52.7 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND ^a	0.14	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		57%	40-140%
84-15-1	o-Terphenyl	83%		40-140%
321-60-8	2-Fluorobiphenyl	87%		40-140%

(a) Result is from Run# 2

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-9342Z (MCCLARY 300' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-6	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	53.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	0.0157	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.434	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	8.82	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	0.0694	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	52.9	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	0.0508	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	10.8	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.910	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	9.95	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	258	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.464	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	0.173	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9342Z (MCCLARY 300' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-6	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate ^a	307	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Carbonate ^a	7.8	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Total as CaCO3 ^a	315	5.0	mg/l	1	07/03/19 15:30	ATX	SM 2320B-2011
Bromide ^a	< 0.60	0.60	mg/l	1	07/02/19 18:45	ATX	SW846 9056A
Chloride ^a	48.5	3.5	mg/l	5	07/02/19 19:01	ATX	SW846 9056A
Silica, Dissolved ^a	10.4	0.70	mg/l	10	07/06/19	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved ^a	648	40	mg/l	1	06/28/19	ATX	SM 2540C-2011
Specific Conductivity ^b	885	1.0	umhos/cm	1	07/02/19 18:00	ATX	EPA 120.1
Sulfate ^a	0.74	0.50	mg/l	1	07/02/19 18:45	ATX	SW846 9056A

(a) Analysis performed at SGS Houston, TX.

(b) Conductivity results corrected to 25 degrees Celsius. Analysis performed at SGS Houston, TX.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-9342Z (MCCLARY 300' WATER WELL)	Date Sampled: 06/25/19
Lab Sample ID: LA55743-6F	Date Received: 06/27/19
Matrix: AQ - Water Filtered	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.0156	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	< 0.020	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	1.31	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	269	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	0.0375	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL) Lab Sample ID: LA55743-7 Matrix: AQ - Water Method: SW846 8260B Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/26/19 Date Received: 06/27/19 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0064594.D	1	06/29/19 18:01	NN	n/a	n/a	V2J1983
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL)	
Lab Sample ID: LA55743-7	Date Sampled: 06/26/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: SW846 8260B	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%		81-120%
2037-26-5	Toluene-D8	93%		93-105%
460-00-4	4-Bromofluorobenzene	95%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL)	Date Sampled: 06/26/19
Lab Sample ID: LA55743-7	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8270D SW846 3510C	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0027685.D	1	07/03/19 02:54	AA	07/02/19 03:45	OP14598	EL734
Run #2							

Run #	Initial Volume	Final Volume
Run #1	110 ml	1.0 ml
Run #2		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	0.0045	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0045	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0045	mg/l	
51-28-5	2,4-Dinitrophenol	ND	0.018	mg/l	
100-02-7	4-Nitrophenol	ND	0.023	mg/l	
87-86-5	Pentachlorophenol	ND	0.00091	mg/l	
108-95-2	Phenol	ND	0.0045	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0045	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0045	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0045	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0045	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0091	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0045	mg/l	
106-47-8	4-Chloroaniline	ND	0.0045	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0045	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0045	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0045	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0045	mg/l	
91-94-1	3,3'-Dichlorobenzidine ^a	ND	0.0091	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0045	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0045	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0045	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0045	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL)	
Lab Sample ID: LA55743-7	Date Sampled: 06/26/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: SW846 8270D SW846 3510C	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	0.0045	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0045	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0045	mg/l	
206-44-0	Fluoranthene	ND	0.00018	mg/l	
86-73-7	Fluorene	ND	0.00018	mg/l	
118-74-1	Hexachlorobenzene	ND	0.00091	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.00045	mg/l	
77-47-4	Hexachlorocyclopentadiene ^b	ND	0.0091	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.00018	mg/l	
78-59-1	Isophorone	ND	0.0045	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.00018	mg/l	
91-20-3	Naphthalene	ND	0.00018	mg/l	
88-74-4	2-Nitroaniline	ND	0.0045	mg/l	
99-09-2	3-Nitroaniline	ND	0.0045	mg/l	
100-01-6	4-Nitroaniline	ND	0.0045	mg/l	
98-95-3	Nitrobenzene	ND	0.00091	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0045	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0045	mg/l	
85-01-8	Phenanthrene	ND	0.00018	mg/l	
129-00-0	Pyrene	ND	0.00018	mg/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.00091	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0045	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	70%		25-101%
4165-62-2	Phenol-d5	57%		17-79%
118-79-6	2,4,6-Tribromophenol	92%		40-144%
4165-60-0	Nitrobenzene-d5	91%		40-124%
321-60-8	2-Fluorobiphenyl	81%		27-124%
1718-51-0	Terphenyl-d14	99%		45-140%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside control limits low. A sensitivity check was analyzed at the project reporting limit and met 8270D criteria. Sample ND.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL) Lab Sample ID: LA55743-7 Matrix: AQ - Water Method: MADEP VPH REV 1.1 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/26/19 Date Received: 06/27/19 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043823.D	1	07/01/19 21:20	NN	n/a	n/a	GLC2239
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	102% ^a		70-130%
615-59-8	2,5-Dibromotoluene	93% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL)	Date Sampled: 06/26/19
Lab Sample ID: LA55743-7	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8011 SW846 8011	
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM001768.D	1	07/08/19 20:05	PC	07/08/19 15:15	OP14640	GLM43
Run #2							

Run #	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
348-51-6	1-Chloro-2-fluorobenzene	110%		60-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL)	
Lab Sample ID: LA55743-7	Date Sampled: 06/26/19
Matrix: AQ - Water	Date Received: 06/27/19
Method: MADEP EPH REV 1.1 SW846 3511	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0010357.D	1	07/11/19 18:30	PC	07/02/19 14:00	OP14611	GLB1941
Run #2	Y0010357.D	1	07/11/19 18:31	PC	07/02/19 14:00	OP14611	GLB1942

Run #	Initial Volume	Final Volume
Run #1	54.2 ml	4.0 ml
Run #2	54.2 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND ^a	0.14	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND ^a	0.14	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.14	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		64%	40-140%
84-15-1	o-Terphenyl	80%		40-140%
321-60-8	2-Fluorobiphenyl	87%		40-140%

(a) Result is from Run# 2

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL)	Date Sampled: 06/26/19
Lab Sample ID: LA55743-7	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.222	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	18.2	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	5.07	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.0512	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	5.14	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	222	1.0	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	1.03	0.020	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	0.0633	0.050	mg/l	10	06/27/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL)	Date Sampled: 06/26/19
Lab Sample ID: LA55743-7	Date Received: 06/27/19
Matrix: AQ - Water	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate ^a	172	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Carbonate ^a	< 5.0	5.0	mg/l	1	07/03/19 15:30	ATX	SM18 2320B
Alkalinity, Total as CaCO3 ^a	173	5.0	mg/l	1	07/03/19 15:30	ATX	SM 2320B-2011
Bromide ^a	0.79	0.60	mg/l	1	07/02/19 19:18	ATX	SW846 9056A
Chloride ^a	151	7.0	mg/l	10	07/02/19 20:09	ATX	SW846 9056A
Silica, Dissolved ^a	17.0	0.70	mg/l	10	07/06/19	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved ^a	585	10	mg/l	1	06/28/19	ATX	SM 2540C-2011
Specific Conductivity ^b	999	1.0	umhos/cm	1	07/02/19 18:00	ATX	EPA 120.1
Sulfate ^a	136	5.0	mg/l	10	07/02/19 20:09	ATX	SW846 9056A

(a) Analysis performed at SGS Houston, TX.

(b) Conductivity results corrected to 25 degrees Celsius. Analysis performed at SGS Houston, TX.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 031-5124Z (SMITH WATER WELL)	Date Sampled: 06/26/19
Lab Sample ID: LA55743-7F	Date Received: 06/27/19
Matrix: AQ - Water Filtered	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Arsenic	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Barium	0.236	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Cadmium	< 0.0050	0.0050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Calcium	20.2	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Chromium	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Iron	< 1.0	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Lead	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Magnesium	5.51	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Manganese	0.0534	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Mercury	< 0.00020	0.00020	mg/l	1	07/01/19	07/01/19 SA	SW846 7470A ²	SW846 7470A ⁴
Potassium	5.45	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Selenium	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Silver	< 0.010	0.010	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Sodium	239	1.0	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Strontium	1.11	0.020	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³
Zinc	< 0.050	0.050	mg/l	10	06/28/19	06/28/19 RT	SW846 6020A ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA16178
- (2) Instrument QC Batch: MA16188
- (3) Prep QC Batch: MP15655
- (4) Prep QC Batch: MP15666

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	06/24/19
Lab Sample ID:	LA55743-8	Date Received:	06/27/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0064570.D	1	06/29/19 12:40	NN	n/a	n/a	V2J1983
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TRIP BLANK	
Lab Sample ID: LA55743-8	Date Sampled: 06/24/19
Matrix: AQ - Trip Blank Water	Date Received: 06/27/19
Method: SW846 8260B	Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%		81-120%
2037-26-5	Toluene-D8	93%		93-105%
460-00-4	4-Bromofluorobenzene	98%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TRIP BLANK		
Lab Sample ID: LA55743-8		Date Sampled: 06/24/19
Matrix: AQ - Trip Blank Water		Date Received: 06/27/19
Method: MADEP VPH REV 1.1		Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043824.D	1	07/01/19 21:50	NN	n/a	n/a	GLC2239
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	105% ^a		70-130%
615-59-8	2,5-Dibromotoluene	97% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	06/24/19
Lab Sample ID:	LA55743-9	Date Received:	06/27/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0064572.D	1	06/29/19 13:07	NN	n/a	n/a	V2J1983
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FIELD BLANK		Date Sampled: 06/24/19
Lab Sample ID: LA55743-9		Date Received: 06/27/19
Matrix: AQ - Field Blank Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		81-120%
2037-26-5	Toluene-D8	93%		93-105%
460-00-4	4-Bromofluorobenzene	97%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	06/24/19
Lab Sample ID:	LA55743-9	Date Received:	06/27/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043825.D	1	07/01/19 22:20	NN	n/a	n/a	GLC2239
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	105% ^a		70-130%
615-59-8	2,5-Dibromotoluene	96% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-10	Date Received:	06/27/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0064574.D	1	06/29/19 13:34	NN	n/a	n/a	V2J1983
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-10	Date Received:	06/27/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		81-120%
2037-26-5	Toluene-D8	93%		93-105%
460-00-4	4-Bromofluorobenzene	97%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FIELD BLANK Lab Sample ID: LA55743-10 Matrix: AQ - Field Blank Water Method: MADEP VPH REV 1.1 Project: 8060.00 Indigo-Desoto Parish, LA	Date Sampled: 06/25/19 Date Received: 06/27/19 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043828.D	1	07/01/19 23:49	NN	n/a	n/a	GLC2239
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	106% ^a		70-130%
615-59-8	2,5-Dibromotoluene	98% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-11	Date Received:	06/27/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0064576.D	1	06/29/19 14:01	NN	n/a	n/a	V2J1983
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	06/25/19
Lab Sample ID:	LA55743-11	Date Received:	06/27/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		81-120%
2037-26-5	Toluene-D8	93%		93-105%
460-00-4	4-Bromofluorobenzene	97%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TRIP BLANK		
Lab Sample ID: LA55743-11		Date Sampled: 06/25/19
Matrix: AQ - Trip Blank Water		Date Received: 06/27/19
Method: MADEP VPH REV 1.1		Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043681.D	1	06/29/19 05:12	CP	n/a	n/a	GLC2235
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	100% ^a		70-130%
615-59-8	2,5-Dibromotoluene	93% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	06/26/19
Lab Sample ID:	LA55743-12	Date Received:	06/27/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0064578.D	1	06/29/19 14:27	NN	n/a	n/a	V2J1983
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	06/26/19
Lab Sample ID:	LA55743-12	Date Received:	06/27/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		81-120%
2037-26-5	Toluene-D8	93%		93-105%
460-00-4	4-Bromofluorobenzene	97%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TRIP BLANK		
Lab Sample ID: LA55743-12		Date Sampled: 06/26/19
Matrix: AQ - Trip Blank Water		Date Received: 06/27/19
Method: MADEP VPH REV 1.1		Percent Solids: n/a
Project: 8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043826.D	1	07/01/19 22:50	NN	n/a	n/a	GLC2239
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	103% ^a		70-130%
615-59-8	2,5-Dibromotoluene	94% ^b		70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	06/26/19
Lab Sample ID:	LA55743-13	Date Received:	06/27/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0064580.D	1	06/29/19 14:54	NN	n/a	n/a	V2J1983
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
541-73-1	m-Dichlorobenzene	ND	0.0010	mg/l	
95-50-1	o-Dichlorobenzene	ND	0.0010	mg/l	
106-46-7	p-Dichlorobenzene	ND	0.0010	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	mg/l	
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	0.0010	mg/l	
78-83-1	Isobutyl Alcohol	ND	0.10	mg/l	
74-83-9	Methyl Bromide	ND	0.0010	mg/l	
74-87-3	Methyl Chloride	ND	0.0010	mg/l	
75-09-2	Methylene Chloride	ND	0.0010	mg/l	
78-93-3	Methyl Ethyl Ketone	ND	0.013	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.013	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	06/26/19
Lab Sample ID:	LA55743-13	Date Received:	06/27/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
100-42-5	Styrene	ND	0.0010	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00050	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	mg/l	
108-88-3	Toluene	ND	0.0050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0010	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	mg/l	
	m,p-Xylene	ND	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		81-120%
2037-26-5	Toluene-D8	93%		93-105%
460-00-4	4-Bromofluorobenzene	97%		89-107%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	06/26/19
Lab Sample ID:	LA55743-13	Date Received:	06/27/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	8060.00 Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC043827.D	1	07/01/19 23:19	NN	n/a	n/a	GLC2239
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	0.15	mg/l	
	Aliphatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
	Aromatics > C8-C10 (Unadj.)	ND	0.15	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
615-59-8	2,5-Dibromotoluene	110% ^a		70-130%	
615-59-8	2,5-Dibromotoluene	100% ^b		70-130%	

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
 Environmental Consultants
 P.O. Box 60295
 Lafayette, LA 70596-0295
 Phone (337) 261-1963 FAX (337) 261-1953

LA55743

SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name: Indigo
 Project Number: 8060.00
 Project Location: DeSoto Parish, Louisiana

Laboratory: SGS Lafayette
 Collected By: LV
 Company: Hydro-Environmental Technology, Inc.
 Date: 6/24/2019

Sample I.D.	Type	Date/Time Sampled	Containers	Analysis Requested/Method	Comments
031-262 (Mason Water Well)	AQ	6/24/2019 12:00	(6) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals
031-9769Z (Bryant Water Well)	AQ	6/24/2019 17:40	(6) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals
031-9843Z (Paul Davis Water Well)	AQ	6/25/2019 9:20	(6) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals
031-9313Z (McClary 235' Water Well)	AQ	6/25/2019 15:40	(6) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals
031-9435Z (McClary 260' Water Well)	AQ	6/25/2019 15:50	(6) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals

Relinquished By: [Signature] 6-27-19
 Date/Time: 6/27/19 13:45
 Received By: Johnny Hebert
 Date/Time: 6/27/19 13:45

Relinquished By: [Signature]
 Date/Time: 6/27/19 14:00
 Received By: [Signature]
 Date/Time: 6/27/19 14:00

Analysis Que: Verbal
 Written: [Signature] T2.0 (DU440)
 3.3

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
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 Lafayette, LA 70596-0295
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LA55743



SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name: Indigo
 Project Number: 8060.00
 Project Location: DeSoto Parish, Louisiana

Laboratory: SGS Lafayette
 Collected By: LV
 Company: Hydro-Environmental Technology, Inc.
 Date: 6/24/2019

Sample I.D.	Type	Date/Time Sampled	Containers	Analysis Requested/Method	Comments
031-5342Z (McClary 300' Water Well)	AQ	6/25/2019 16:25	(6) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals
031-5124Z (Smith Water Well)	AQ	6/26/2019 13:40	(6) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals
Trip Blank	AQ	6/24/2019 6:30	(6) 40mL Glass HCl	VOC 8260, VPH	4°C
Field Blank	AQ	6/24/2019 10:25	(6) 40mL Glass HCl	VOC 8260, VPH	4°C
Field Blank	AQ	6/25/2019 7:30	(6) 40mL Glass HCl	VOC 8260, VPH	4°C

*Metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, strontium, zinc
 *Cations: aluminum, calcium, iron, magnesium, manganese, potassium, sodium
 *Anions: bromide, sulfate, carbonate alkalinity, bicarbonate alkalinity

Relinquished By: [Signature] Received By: [Signature] 6-27-19
 Date/Time: 6/24/2019 13:45 Date/Time: 6/27/19
 Relinquished By: [Signature] Received By: [Signature] 1400
 Date/Time: 6/25/2019 2:00 Date/Time: 6/27/19
 Analysis Dye: Verbat: [Signature]





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 Phone (337) 261-1963 FAX (337) 261-1953

LA55743

SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name: Indigo
 Project Number: 8060.00
 Project Location: DeSoto Parish, Louisiana

Laboratory: SGS Lafayette
 Collected By: LV
 Company: Hydro-Environmental Technology, Inc.
 Date: 6/24/2019

Sample I.D.	Type	Date/Time Sampled	Containers	Analysis Requested/Method	Comments
Trip Blank	AQ	6/25/2019 6:30	(6) 40mL Glass HCl	VOC 8260, VPH	4°C
Trip Blank	AQ	6/26/2019 6:30	(6) 40mL Glass HCl	VOC 8260, VPH	4°C
Field Blank	AQ	6/26/2019 7:30	(6) 40mL Glass HCl	VOC 8260, VPH	4°C

*Metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, strontium, zinc
 *Cations: aluminum, calcium, iron, magnesium, manganese, potassium, sodium
 *Anions: bromide, sulfate, carbonate alkalinity, bicarbonate alkalinity

Relinquished By: *[Signature]* Received By: *[Signature]*
 Date/Time: 6/24/19 1345 Date/Time: 6-27-19
 Relinquished By: *[Signature]* Received By: *[Signature]*
 Date/Time: 6/27/19 1400 Date/Time: 6/27/19
 Analysis type: Verbal: *[Signature]* Written: *[Signature]*

SGS Sample Receipt Summary

Job Number: LA55743

Client: HYDRO-ENVIRONMENTAL

Project: INDIGO

Date / Time Received: 6/27/2019 2:00:00 PM

Delivery Method: Accutest Courier

Airbill #'s: _____

Cooler Temps (Initial/Adjusted): #1: (2/2); #2: (3.3/3.3);

Cooler Security

- | | | | | | | | |
|---------------------------|--------------------------|-----------|-------------------------------------|-----------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Custody Seals Present: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Cooler Temperature

- | | | | |
|----------------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Thermometer ID: | <u>DV440;</u> | | |
| 3. Cooler media: | <u>Ice (direct contact)</u> | | |
| 4. No. Coolers: | <u>2</u> | | |

Quality Control Preservation

- | | | | | |
|---------------------------------|-------------------------------------|-----------|--------------------------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

- | | | | |
|--|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Sample Integrity - Condition

- | | | | |
|----------------------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Condition of sample: | <u>Intact</u> | | |

Sample Integrity - Instructions

- | | | | | |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1983-MB2	2J0064568.D	1	06/29/19	NN	n/a	n/a	V2J1983

The QC reported here applies to the following samples: Method: SW846 8260B

LA55743-3, LA55743-7, LA55743-8, LA55743-9, LA55743-10, LA55743-11, LA55743-12, LA55743-13

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	3.5	50	ug/l	J
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
75-15-0	Carbon Disulfide	ND	1.0	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
67-72-1	Hexachloroethane	ND	1.0	ug/l	
78-83-1	Isobutyl Alcohol	ND	100	ug/l	
74-83-9	Methyl Bromide	ND	1.0	ug/l	
74-87-3	Methyl Chloride	ND	1.0	ug/l	
75-09-2	Methylene Chloride	ND	1.0	ug/l	
78-93-3	Methyl Ethyl Ketone	ND	13	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
100-42-5	Styrene	ND	1.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	ug/l	

4.1.1
4

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1983-MB2	2J0064568.D	1	06/29/19	NN	n/a	n/a	V2J1983

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-3, LA55743-7, LA55743-8, LA55743-9, LA55743-10, LA55743-11, LA55743-12, LA55743-13

CAS No.	Compound	Result	RL	Units	Q
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethylene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	105%	81-120%
2037-26-5	Toluene-D8	94%	93-105%
460-00-4	4-Bromofluorobenzene	96%	89-107%

4.1.1
4

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I2248-MB2	2I062041.D	1	07/02/19	CP	n/a	n/a	V2I2248

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-1, LA55743-2, LA55743-4, LA55743-5, LA55743-6

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	3.1	50	ug/l	J
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
75-15-0	Carbon Disulfide	ND	1.0	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
67-72-1	Hexachloroethane	ND	1.0	ug/l	
78-83-1	Isobutyl Alcohol	ND	100	ug/l	
74-83-9	Methyl Bromide	2.5	1.0	ug/l	
74-87-3	Methyl Chloride	ND	1.0	ug/l	
75-09-2	Methylene Chloride	0.33	1.0	ug/l	J
78-93-3	Methyl Ethyl Ketone	ND	13	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
100-42-5	Styrene	ND	1.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	ug/l	

4.1.2
4

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I2248-MB2	2I062041.D	1	07/02/19	CP	n/a	n/a	V2I2248

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-1, LA55743-2, LA55743-4, LA55743-5, LA55743-6

CAS No.	Compound	Result	RL	Units	Q
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethylene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	117%	81-120%
2037-26-5	Toluene-D8	96%	93-105%
460-00-4	4-Bromofluorobenzene	98%	89-107%

4.1.2
4

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1983-BS1	2J0064562.D	1	06/29/19	NN	n/a	n/a	V2J1983
V2J1983-BSD1	2J0064564.D	1	06/29/19	NN	n/a	n/a	V2J1983

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-3, LA55743-7, LA55743-8, LA55743-9, LA55743-10, LA55743-11, LA55743-12, LA55743-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	47.2	94	49.0	98	4	35-173/20
71-43-2	Benzene	20	20.1	101	19.6	98	3	82-119/11
75-27-4	Bromodichloromethane	20	21.4	107	21.1	106	1	76-124/11
75-25-2	Bromoform	20	19.4	97	19.8	99	2	52-131/14
75-15-0	Carbon Disulfide	20	19.5	98	19.5	98	0	69-135/14
56-23-5	Carbon Tetrachloride	20	20.6	103	20.5	103	0	73-127/13
108-90-7	Chlorobenzene	20	21.2	106	21.2	106	0	82-118/11
75-00-3	Chloroethane	20	25.9	130	25.7	129	1	57-146/20
67-66-3	Chloroform	20	20.5	103	20.1	101	2	77-122/12
124-48-1	Dibromochloromethane	20	19.8	99	20.2	101	2	68-126/12
541-73-1	m-Dichlorobenzene	20	21.3	107	21.0	105	1	78-122/12
95-50-1	o-Dichlorobenzene	20	20.9	105	21.5	108	3	78-122/12
106-46-7	p-Dichlorobenzene	20	20.8	104	21.1	106	1	79-119/12
75-34-3	1,1-Dichloroethane	20	19.3	97	19.0	95	2	77-124/14
107-06-2	1,2-Dichloroethane	20	22.3	112	22.1	111	1	71-124/11
75-35-4	1,1-Dichloroethylene	20	20.8	104	20.3	102	2	77-125/14
156-59-2	cis-1,2-Dichloroethylene	20	19.6	98	19.6	98	0	79-121/13
156-60-5	trans-1,2-Dichloroethylene	20	19.8	99	19.6	98	1	77-124/14
540-59-0	1,2-Dichloroethene (total)	40	39.4	99	39.2	98	1	80-121/13
78-87-5	1,2-Dichloropropane	20	18.5	93	18.0	90	3	81-117/11
10061-01-5	cis-1,3-Dichloropropene	20	18.6	93	18.3	92	2	77-123/11
10061-02-6	trans-1,3-Dichloropropene	20	21.7	109	21.9	110	1	74-127/12
542-75-6	1,3-Dichloropropene (total)	40	40.3	101	40.2	101	0	76-124/11
100-41-4	Ethylbenzene	20	21.7	109	21.7	109	0	82-120/11
67-72-1	Hexachloroethane	20	19.1	96	18.5	93	3	54-132/15
78-83-1	Isobutyl Alcohol	200	139	70	147	74	6	37-152/30
74-83-9	Methyl Bromide	20	26.2	131	26.0	130	1	46-165/20
74-87-3	Methyl Chloride	20	29.4	147*	29.3	147*	0	55-140/18
75-09-2	Methylene Chloride	20	19.0	95	19.1	96	1	73-132/14
78-93-3	Methyl Ethyl Ketone	50	45.0	90	46.5	93	3	55-149/19
108-10-1	4-Methyl-2-pentanone	50	47.8	96	47.3	95	1	63-137/17
1634-04-4	Methyl Tert Butyl Ether	20	19.8	99	19.9	100	1	73-124/14
100-42-5	Styrene	20	22.1	111	22.3	112	1	80-126/12
630-20-6	1,1,1,2-Tetrachloroethane	20	22.4	112	22.8	114	2	77-126/12
79-34-5	1,1,2,2-Tetrachloroethane	20	19.1	96	19.2	96	1	69-134/14
127-18-4	Tetrachloroethylene	20	21.8	109	21.3	107	2	79-121/13

* = Outside of Control Limits.

4.2.1
4

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1983-BS1	2J0064562.D	1	06/29/19	NN	n/a	n/a	V2J1983
V2J1983-BSD1	2J0064564.D	1	06/29/19	NN	n/a	n/a	V2J1983

The QC reported here applies to the following samples: Method: SW846 8260B

LA55743-3, LA55743-7, LA55743-8, LA55743-9, LA55743-10, LA55743-11, LA55743-12, LA55743-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-88-3	Toluene	20	20.1	101	20.1	101	0	82-118/12
71-55-6	1,1,1-Trichloroethane	20	21.7	109	21.0	105	3	79-126/13
79-00-5	1,1,2-Trichloroethane	20	20.1	101	20.1	101	0	80-120/12
79-01-6	Trichloroethylene	20	21.1	106	20.4	102	3	78-121/12
75-69-4	Trichlorofluoromethane	20	24.0	120	23.8	119	1	74-129/14
75-01-4	Vinyl Chloride	20	20.1	101	19.5	98	3	74-125/14
	m,p-Xylene	40	44.4	111	44.8	112	1	82-123/11
95-47-6	o-Xylene	20	21.8	109	21.7	109	0	81-123/11
1330-20-7	Xylene (total)	60	66.2	110	66.5	111	0	82-122/11

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	100%	100%	81-120%
2037-26-5	Toluene-D8	96%	96%	93-105%
460-00-4	4-Bromofluorobenzene	99%	100%	89-107%

* = Outside of Control Limits.

4.2.1
4

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I2248-BS1	2I062033.D	1	07/02/19	CP	n/a	n/a	V2I2248
V2I2248-BSD1	2I062035.D	1	07/02/19	CP	n/a	n/a	V2I2248

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-1, LA55743-2, LA55743-4, LA55743-5, LA55743-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	57.0	114	50.7	101	12	35-173/20
71-43-2	Benzene	20	20.6	103	21.1	106	2	82-119/11
75-27-4	Bromodichloromethane	20	22.4	112	22.3	112	0	76-124/11
75-25-2	Bromoform	20	20.4	102	19.2	96	6	52-131/14
75-15-0	Carbon Disulfide	20	21.0	105	21.0	105	0	69-135/14
56-23-5	Carbon Tetrachloride	20	24.5	123	24.1	121	2	73-127/13
108-90-7	Chlorobenzene	20	20.5	103	20.7	104	1	82-118/11
75-00-3	Chloroethane	20	22.7	114	22.7	114	0	57-146/20
67-66-3	Chloroform	20	21.3	107	21.9	110	3	77-122/12
124-48-1	Dibromochloromethane	20	21.6	108	22.1	111	2	68-126/12
541-73-1	m-Dichlorobenzene	20	20.3	102	21.1	106	4	78-122/12
95-50-1	o-Dichlorobenzene	20	19.4	97	20.0	100	3	78-122/12
106-46-7	p-Dichlorobenzene	20	19.6	98	19.7	99	1	79-119/12
75-34-3	1,1-Dichloroethane	20	22.1	111	21.8	109	1	77-124/14
107-06-2	1,2-Dichloroethane	20	25.0	125*	24.4	122	2	71-124/11
75-35-4	1,1-Dichloroethylene	20	23.4	117	23.0	115	2	77-125/14
156-59-2	cis-1,2-Dichloroethylene	20	21.3	107	21.7	109	2	79-121/13
156-60-5	trans-1,2-Dichloroethylene	20	21.5	108	21.8	109	1	77-124/14
540-59-0	1,2-Dichloroethene (total)	40	42.8	107	43.6	109	2	80-121/13
78-87-5	1,2-Dichloropropane	20	20.8	104	20.7	104	0	81-117/11
10061-01-5	cis-1,3-Dichloropropene	20	21.5	108	21.7	109	1	77-123/11
10061-02-6	trans-1,3-Dichloropropene	20	21.0	105	21.0	105	0	74-127/12
542-75-6	1,3-Dichloropropene (total)	40	42.5	106	42.7	107	0	76-124/11
100-41-4	Ethylbenzene	20	21.1	106	21.7	109	3	82-120/11
67-72-1	Hexachloroethane	20	20.6	103	20.1	101	2	54-132/15
78-83-1	Isobutyl Alcohol	200	244	122	192	96	24	37-152/30
74-83-9	Methyl Bromide	20	27.1	136	26.5	133	2	46-165/20
74-87-3	Methyl Chloride	20	19.9	100	20.2	101	1	55-140/18
75-09-2	Methylene Chloride	20	20.4	102	20.4	102	0	73-132/14
78-93-3	Methyl Ethyl Ketone	50	58.3	117	51.2	102	13	55-149/19
108-10-1	4-Methyl-2-pentanone	50	52.7	105	49.0	98	7	63-137/17
1634-04-4	Methyl Tert Butyl Ether	20	21.2	106	20.2	101	5	73-124/14
100-42-5	Styrene	20	22.1	111	22.4	112	1	80-126/12
630-20-6	1,1,1,2-Tetrachloroethane	20	22.5	113	23.1	116	3	77-126/12
79-34-5	1,1,2,2-Tetrachloroethane	20	19.0	95	19.7	99	4	69-134/14
127-18-4	Tetrachloroethylene	20	21.0	105	21.5	108	2	79-121/13

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I2248-BS1	2I062033.D	1	07/02/19	CP	n/a	n/a	V2I2248
V2I2248-BSD1	2I062035.D	1	07/02/19	CP	n/a	n/a	V2I2248

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-1, LA55743-2, LA55743-4, LA55743-5, LA55743-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-88-3	Toluene	20	20.2	101	20.2	101	0	82-118/12
71-55-6	1,1,1-Trichloroethane	20	24.6	123	24.4	122	1	79-126/13
79-00-5	1,1,2-Trichloroethane	20	19.3	97	19.4	97	1	80-120/12
79-01-6	Trichloroethylene	20	22.4	112	22.4	112	0	78-121/12
75-69-4	Trichlorofluoromethane	20	24.7	124	24.9	125	1	74-129/14
75-01-4	Vinyl Chloride	20	21.1	106	21.2	106	0	74-125/14
	m,p-Xylene	40	43.8	110	45.4	114	4	82-123/11
95-47-6	o-Xylene	20	21.3	107	21.7	109	2	81-123/11
1330-20-7	Xylene (total)	60	65.1	109	67.1	112	3	82-122/11

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	112%	107%	81-120%
2037-26-5	Toluene-D8	100%	99%	93-105%
460-00-4	4-Bromofluorobenzene	102%	104%	89-107%

* = Outside of Control Limits.

4.2.2
4

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA55743-1MS	2J0064608.D	5	06/29/19	NN	n/a	n/a	V2J1983
LA55743-1MSD	2J0064610.D	5	06/29/19	NN	n/a	n/a	V2J1983
LA55743-1 ^a	2J0064582.D	1	06/29/19	NN	n/a	n/a	V2J1983

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-3, LA55743-7, LA55743-8, LA55743-9, LA55743-10, LA55743-11, LA55743-12, LA55743-13

CAS No.	Compound	LA55743-1	Spike	MS	MS	Spike	MSD	MSD	RPD	Limits
		ug/l	Q	ug/l	ug/l	%	ug/l	ug/l		%
67-64-1	Acetone	3.8	250	169	66	250	178	70	5	11-126/22
71-43-2	Benzene	ND	100	95.9	96	100	95.0	95	1	41-155/14
75-27-4	Bromodichloromethane	ND	100	98.3	98	100	99.1	99	1	65-125/14
75-25-2	Bromoform	ND	100	89.7	90	100	94.6	95	5	39-127/18
75-15-0	Carbon Disulfide	ND	100	87.8	88	100	85.2	85	3	55-139/20
56-23-5	Carbon Tetrachloride	ND	100	97.1	97	100	94.4	94	3	60-131/20
108-90-7	Chlorobenzene	ND	100	98.1	98	100	98.6	99	1	71-124/14
75-00-3	Chloroethane	ND	100	122	122	100	120	120	2	44-163/31
67-66-3	Chloroform	ND	100	95.7	96	100	93.6	94	2	65-130/15
124-48-1	Dibromochloromethane	ND	100	92.1	92	100	89.9	90	2	57-125/15
541-73-1	m-Dichlorobenzene	ND	100	98.5	99	100	98.2	98	0	67-124/14
95-50-1	o-Dichlorobenzene	ND	100	100	100	100	97.3	97	3	67-124/14
106-46-7	p-Dichlorobenzene	ND	100	96.9	97	100	96.0	96	1	66-122/15
75-34-3	1,1-Dichloroethane	ND	100	91.5	92	100	87.9	88	4	65-132/17
107-06-2	1,2-Dichloroethane	ND	100	107	107	100	106	106	1	61-130/13
75-35-4	1,1-Dichloroethylene	ND	100	95.9	96	100	93.6	94	2	62-136/20
156-59-2	cis-1,2-Dichloroethylene	ND	100	89.4	89	100	87.5	88	2	68-129/15
156-60-5	trans-1,2-Dichloroethylene	ND	100	91.7	92	100	90.0	90	2	65-132/18
540-59-0	1,2-Dichloroethene (total)	ND	200	181	91	200	178	89	2	66-130/15
78-87-5	1,2-Dichloropropane	ND	100	84.6	85	100	85.7	86	1	71-123/14
10061-01-5	cis-1,3-Dichloropropene	ND	100	77.5	78	100	79.2	79	2	61-125/15
10061-02-6	trans-1,3-Dichloropropene	ND	100	100	100	100	99.3	99	1	59-128/14
542-75-6	1,3-Dichloropropene (total)	ND	200	178	89	200	179	90	1	61-126/14
100-41-4	Ethylbenzene	ND	100	103	103	100	103	103	0	50-147/15
67-72-1	Hexachloroethane	ND	100	84.0	84	100	86.0	86	2	42-122/21
78-83-1	Isobutyl Alcohol	ND	1000	694	69	1000	737	74	6	6-168/41
74-83-9	Methyl Bromide	ND	100	113	113	100	112	112	1	24-163/28
74-87-3	Methyl Chloride	ND	100	140	140	100	135	135	4	37-151/22
75-09-2	Methylene Chloride	ND	100	92.5	93	100	89.0	89	4	63-137/16
78-93-3	Methyl Ethyl Ketone	ND	250	199	80	250	204	82	2	35-137/21
108-10-1	4-Methyl-2-pentanone	ND	250	240	96	250	247	99	3	48-146/21
1634-04-4	Methyl Tert Butyl Ether	ND	100	91.8	92	100	93.0	93	1	48-143/15
100-42-5	Styrene	ND	100	101	101	100	101	101	0	58-140/18
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	104	104	100	107	107	3	67-127/15
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	93.6	94	100	93.8	94	0	62-139/16
127-18-4	Tetrachloroethylene	ND	100	103	103	100	101	101	2	68-127/19

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA55743-1MS	2J0064608.D	5	06/29/19	NN	n/a	n/a	V2J1983
LA55743-1MSD	2J0064610.D	5	06/29/19	NN	n/a	n/a	V2J1983
LA55743-1 ^a	2J0064582.D	1	06/29/19	NN	n/a	n/a	V2J1983

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-3, LA55743-7, LA55743-8, LA55743-9, LA55743-10, LA55743-11, LA55743-12, LA55743-13

CAS No.	Compound	LA55743-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-88-3	Toluene	ND	100	95.8	96	100	96.9	97	1	40-153/15
71-55-6	1,1,1-Trichloroethane	ND	100	103	103	100	98.4	98	5	68-132/18
79-00-5	1,1,2-Trichloroethane	ND	100	92.7	93	100	94.0	94	1	62-137/16
79-01-6	Trichloroethylene	ND	100	97.9	98	100	97.8	98	0	67-124/16
75-69-4	Trichlorofluoromethane	ND	100	113	113	100	107	107	5	65-134/17
75-01-4	Vinyl Chloride	ND	100	94.2	94	100	92.0	92	2	60-133/16
	m,p-Xylene	ND	200	210	105	200	210	105	0	47-153/15
95-47-6	o-Xylene	ND	100	99.3	99	100	99.2	99	0	50-149/14
1330-20-7	Xylene (total)	ND	300	309	103	300	310	103	0	46-154/15

CAS No.	Surrogate Recoveries	MS	MSD	LA55743-1	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	101%		81-120%
2037-26-5	Toluene-D8	96%	96%		93-105%
460-00-4	4-Bromofluorobenzene	101%	101%		89-107%

(a) Sample used for QC purposes only.

* = Outside of Control Limits.

4.3.1
4

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA55773-11MS	2I062047.D	20	07/02/19	CP	n/a	n/a	V2I2248
LA55773-11MSD	2I062049.D	20	07/02/19	CP	n/a	n/a	V2I2248
LA55773-11	2I062045.D	10	07/02/19	CP	n/a	n/a	V2I2248

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-1, LA55743-2, LA55743-4, LA55743-5, LA55743-6

CAS No.	Compound	LA55773-11 Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
67-64-1	Acetone	ND	1000	729	73	1000	700	70	4	11-126/22
71-43-2	Benzene	ND	400	408	102	400	393	98	4	41-155/14
75-27-4	Bromodichloromethane	ND	400	449	112	400	420	105	7	65-125/14
75-25-2	Bromoform	ND	400	388	97	400	389	97	0	39-127/18
75-15-0	Carbon Disulfide	ND	400	407	102	400	390	98	4	55-139/20
56-23-5	Carbon Tetrachloride	ND	400	467	117	400	446	112	5	60-131/20
108-90-7	Chlorobenzene	ND	400	411	103	400	401	100	2	71-124/14
75-00-3	Chloroethane	ND	400	460	115	400	455	114	1	44-163/31
67-66-3	Chloroform	ND	400	429	107	400	413	103	4	65-130/15
124-48-1	Dibromochloromethane	ND	400	441	110	400	431	108	2	57-125/15
541-73-1	m-Dichlorobenzene	ND	400	385	96	400	383	96	1	67-124/14
95-50-1	o-Dichlorobenzene	ND	400	387	97	400	372	93	4	67-124/14
106-46-7	p-Dichlorobenzene	ND	400	377	94	400	369	92	2	66-122/15
75-34-3	1,1-Dichloroethane	ND	400	432	108	400	419	105	3	65-132/17
107-06-2	1,2-Dichloroethane	ND	400	507	127	400	479	120	6	61-130/13
75-35-4	1,1-Dichloroethylene	ND	400	450	113	400	434	109	4	62-136/20
156-59-2	cis-1,2-Dichloroethylene	ND	400	428	107	400	416	104	3	68-129/15
156-60-5	trans-1,2-Dichloroethylene	ND	400	434	109	400	396	99	9	65-132/18
540-59-0	1,2-Dichloroethene (total)	ND	800	862	108	800	812	102	6	66-130/15
78-87-5	1,2-Dichloropropane	ND	400	410	103	400	398	100	3	71-123/14
10061-01-5	cis-1,3-Dichloropropene	ND	400	421	105	400	398	100	6	61-125/15
10061-02-6	trans-1,3-Dichloropropene	ND	400	412	103	400	419	105	2	59-128/14
542-75-6	1,3-Dichloropropene (total)	ND	800	833	104	800	817	102	2	61-126/14
100-41-4	Ethylbenzene	ND	400	419	105	400	413	103	1	50-147/15
67-72-1	Hexachloroethane	ND	400	360	90	400	359	90	0	42-122/21
78-83-1	Isobutyl Alcohol	374	4000	4000	91	4000	4330	99	8	6-168/41
74-83-9	Methyl Bromide	12.9	400	433	105	400	486	118	12	24-163/28
74-87-3	Methyl Chloride	ND	400	395	99	400	385	96	3	37-151/22
75-09-2	Methylene Chloride	5.1	400	398	98	400	390	96	2	63-137/16
78-93-3	Methyl Ethyl Ketone	ND	1000	1020	102	1000	984	98	4	35-137/21
108-10-1	4-Methyl-2-pentanone	ND	1000	1070	107	1000	1040	104	3	48-146/21
1634-04-4	Methyl Tert Butyl Ether	919	400	1300	95	400	1280	90	2	48-143/15
100-42-5	Styrene	ND	400	432	108	400	426	107	1	58-140/18
630-20-6	1,1,1,2-Tetrachloroethane	ND	400	442	111	400	438	110	1	67-127/15
79-34-5	1,1,2,2-Tetrachloroethane	ND	400	381	95	400	369	92	3	62-139/16
127-18-4	Tetrachloroethylene	ND	400	408	102	400	408	102	0	68-127/19

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA55773-11MS	2I062047.D	20	07/02/19	CP	n/a	n/a	V2I2248
LA55773-11MSD	2I062049.D	20	07/02/19	CP	n/a	n/a	V2I2248
LA55773-11	2I062045.D	10	07/02/19	CP	n/a	n/a	V2I2248

The QC reported here applies to the following samples:

Method: SW846 8260B

LA55743-1, LA55743-2, LA55743-4, LA55743-5, LA55743-6

CAS No.	Compound	LA55773-11 Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q ug/l							
108-88-3	Toluene	ND	400	396	99	400	388	97	2	40-153/15
71-55-6	1,1,1-Trichloroethane	ND	400	482	121	400	460	115	5	68-132/18
79-00-5	1,1,2-Trichloroethane	ND	400	386	97	400	395	99	2	62-137/16
79-01-6	Trichloroethylene	ND	400	437	109	400	405	101	8	67-124/16
75-69-4	Trichlorofluoromethane	ND	400	503	126	400	483	121	4	65-134/17
75-01-4	Vinyl Chloride	ND	400	418	105	400	402	101	4	60-133/16
	m,p-Xylene	ND	800	878	110	800	851	106	3	47-153/15
95-47-6	o-Xylene	ND	400	416	104	400	409	102	2	50-149/14
1330-20-7	Xylene (total)	ND	1200	1290	108	1200	1260	105	2	46-154/15

CAS No.	Surrogate Recoveries	MS	MSD	LA55773-11	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	112%	127%*	81-120%
2037-26-5	Toluene-D8	99%	98%	97%	93-105%
460-00-4	4-Bromofluorobenzene	105%	104%	98%	89-107%

* = Outside of Control Limits.

4.3.2
4

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14575-MB	L0027604.D	1	07/01/19	AA	06/28/19	OP14575	EL732

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-1, LA55743-2

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
100-02-7	4-Nitrophenol	ND	25	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	ug/l	
83-32-9	Acenaphthene	ND	0.20	ug/l	
208-96-8	Acenaphthylene	ND	0.20	ug/l	
62-53-3	Aniline	ND	5.0	ug/l	
120-12-7	Anthracene	ND	0.20	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	ug/l	
92-52-4	1,1'-Biphenyl	ND	10	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	5.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
218-01-9	Chrysene	ND	0.20	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	ug/l	
132-64-9	Dibenzofuran	ND	5.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	ug/l	
84-66-2	Diethyl Phthalate	0.037	5.0	ug/l	J
131-11-3	Dimethyl Phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl Phthalate	ND	5.0	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.19	5.0	ug/l	J
206-44-0	Fluoranthene	ND	0.20	ug/l	

5.1.1
5

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14575-MB	L0027604.D	1	07/01/19	AA	06/28/19	OP14575	EL732

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-1, LA55743-2

CAS No.	Compound	Result	RL	Units	Q
86-73-7	Fluorene	ND	0.20	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	0.016	0.20	ug/l	J
88-74-4	2-Nitroaniline	ND	5.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
85-01-8	Phenanthrene	ND	0.20	ug/l	
129-00-0	Pyrene	ND	0.20	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	74%	25-101%
4165-62-2	Phenol-d5	65%	17-79%
118-79-6	2,4,6-Tribromophenol	74%	40-144%
4165-60-0	Nitrobenzene-d5	83%	40-124%
321-60-8	2-Fluorobiphenyl	79%	27-124%
1718-51-0	Terphenyl-d14	97%	45-140%

5.1.1
5

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14598-MB	L0027665.D	1	07/02/19	AA	07/02/19	OP14598	EL734

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
100-02-7	4-Nitrophenol	ND	25	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	ug/l	
83-32-9	Acenaphthene	ND	0.20	ug/l	
208-96-8	Acenaphthylene	ND	0.20	ug/l	
62-53-3	Aniline	ND	5.0	ug/l	
120-12-7	Anthracene	ND	0.20	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	ug/l	
92-52-4	1,1'-Biphenyl	ND	10	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	5.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
218-01-9	Chrysene	ND	0.20	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	ug/l	
132-64-9	Dibenzofuran	ND	5.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	ug/l	
84-66-2	Diethyl Phthalate	0.040	5.0	ug/l	J
131-11-3	Dimethyl Phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl Phthalate	ND	5.0	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.53	5.0	ug/l	J
206-44-0	Fluoranthene	ND	0.20	ug/l	

5.1.2
5

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14598-MB	L0027665.D	1	07/02/19	AA	07/02/19	OP14598	EL734

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Result	RL	Units	Q
86-73-7	Fluorene	ND	0.20	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	ND	0.20	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
85-01-8	Phenanthrene	0.014	0.20	ug/l	J
129-00-0	Pyrene	ND	0.20	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	72%	25-101%
4165-62-2	Phenol-d5	66%	17-79%
118-79-6	2,4,6-Tribromophenol	81%	40-144%
4165-60-0	Nitrobenzene-d5	85%	40-124%
321-60-8	2-Fluorobiphenyl	75%	27-124%
1718-51-0	Terphenyl-d14	101%	45-140%

5.1.2
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14575-BS	L0027605.D	1	07/01/19	AA	06/28/19	OP14575	EL732
OP14575-BSD	L0027606.D	1	07/01/19	AA	06/28/19	OP14575	EL732

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-1, LA55743-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	5	4.4	88	4.3	86	2	48-123/17
120-83-2	2,4-Dichlorophenol	5	4.2	84	4.4	88	5	52-135/17
105-67-9	2,4-Dimethylphenol	5	3.8	76	4.0	80	5	47-132/21
51-28-5	2,4-Dinitrophenol	25	15.4	62	16.2	65	5	32-139/25
100-02-7	4-Nitrophenol	25	15.7	63	16.0	64	2	15-105/22
87-86-5	Pentachlorophenol	25	21.1	84	21.2	85	0	51-131/19
108-95-2	Phenol	5	3.2	64	3.2	64	0	19-92/23
58-90-2	2,3,4,6-Tetrachlorophenol	5	3.4	68	3.6	72	6	57-136/19
95-95-4	2,4,5-Trichlorophenol	5	3.9	78	4.1	82	5	51-143/17
88-06-2	2,4,6-Trichlorophenol	5	3.7	74	4.0	80	8	59-132/19
83-32-9	Acenaphthene	5	4.0	80	4.0	80	0	50-120/16
208-96-8	Acenaphthylene	5	4.2	84	4.2	84	0	48-126/16
62-53-3	Aniline	5	3.1	62	2.7	54	14	10-112/50
120-12-7	Anthracene	5	4.3	86	4.2	84	2	53-128/16
56-55-3	Benzo(a)anthracene	5	4.8	96	4.6	92	4	54-129/19
50-32-8	Benzo(a)pyrene	5	4.1	82	4.0	80	2	55-135/19
205-99-2	Benzo(b)fluoranthene	5	5.2	104	4.9	98	6	54-139/23
207-08-9	Benzo(k)fluoranthene	5	4.5	90	4.5	90	0	58-132/22
92-52-4	1,1'-Biphenyl	5	4.2	84	4.1	82	2	44-127/17
85-68-7	Butyl Benzyl Phthalate	5	4.5	90	4.4	88	2	63-141/20
106-47-8	4-Chloroaniline	5	3.1	62	3.2	64	3	19-126/38
111-44-4	bis(2-Chloroethyl)ether	5	4.4	88	4.3	86	2	45-123/17
108-60-1	2,2'-Oxybis(1-chloropropane)	5	4.1	82	4.0	80	2	29-126/17
91-58-7	2-Chloronaphthalene	5	4.0	80	4.0	80	0	44-123/20
218-01-9	Chrysene	5	4.5	90	4.4	88	2	57-127/20
53-70-3	Dibenzo(a,h)anthracene	5	4.1	82	4.0	80	2	58-141/21
132-64-9	Dibenzofuran	5	4.1	82	4.1	82	0	48-126/17
91-94-1	3,3'-Dichlorobenzidine	5	7.6	152	7.4	148	3	10-188/40
84-66-2	Diethyl Phthalate	5	4.1	82	4.0	80	2	54-133/17
131-11-3	Dimethyl Phthalate	5	4.5	90	4.6	92	2	56-132/17
117-84-0	Di-n-octyl Phthalate	5	4.6	92	4.4	88	4	66-139/21
99-65-0	1,3-Dinitrobenzene	25	18.8	75	19.2	77	2	64-133/16
121-14-2	2,4-Dinitrotoluene	5	4.0	80	4.0	80	0	67-132/20
606-20-2	2,6-Dinitrotoluene	5	4.6	92	4.6	92	0	56-138/20
117-81-7	bis(2-Ethylhexyl)phthalate	5	4.7	94	4.4	88	7	60-142/20
206-44-0	Fluoranthene	5	4.7	94	4.6	92	2	57-133/18

* = Outside of Control Limits.

5.2.1
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Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14575-BS	L0027605.D	1	07/01/19	AA	06/28/19	OP14575	EL732
OP14575-BSD	L0027606.D	1	07/01/19	AA	06/28/19	OP14575	EL732

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-1, LA55743-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
86-73-7	Fluorene	5	4.3	86	4.3	86	0	52-125/15
118-74-1	Hexachlorobenzene	5	4.1	82	4.1	82	0	47-127/21
87-68-3	Hexachlorobutadiene	5	3.1	62	3.3	66	6	14-121/30
77-47-4	Hexachlorocyclopentadiene	5	1.7	34	1.8	36	6	10-114/31
193-39-5	Indeno(1,2,3-cd)pyrene	5	4.1	82	4.1	82	0	58-142/19
78-59-1	Isophorone	5	4.4	88	4.7	94	7	52-130/18
91-57-6	2-Methylnaphthalene	5	3.8	76	3.9	78	3	43-123/18
91-20-3	Naphthalene	5	4.1	82	4.1	82	0	45-120/16
88-74-4	2-Nitroaniline	25	19.6	78	19.8	79	1	63-132/17
99-09-2	3-Nitroaniline	25	23.7	95	23.5	94	1	31-144/23
100-01-6	4-Nitroaniline	25	25.2	101	24.6	98	2	22-154/25
98-95-3	Nitrobenzene	5	4.8	96	4.9	98	2	52-128/17
621-64-7	N-Nitroso-di-n-propylamine	5	4.5	90	4.6	92	2	48-129/20
86-30-6	N-Nitrosodiphenylamine	5	3.9	78	3.8	76	3	26-146/28
85-01-8	Phenanthrene	5	4.2	84	4.1	82	2	54-124/17
129-00-0	Pyrene	5	4.7	94	4.5	90	4	56-132/19
95-94-3	1,2,4,5-Tetrachlorobenzene	5	3.3	66	3.3	66	0	33-121/24
120-82-1	1,2,4-Trichlorobenzene	5	3.5	70	3.6	72	3	34-118/23

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	66%	69%	25-101%
4165-62-2	Phenol-d5	64%	63%	17-79%
118-79-6	2,4,6-Tribromophenol	81%	82%	40-144%
4165-60-0	Nitrobenzene-d5	87%	88%	40-124%
321-60-8	2-Fluorobiphenyl	81%	84%	27-124%
1718-51-0	Terphenyl-d14	98%	96%	45-140%

* = Outside of Control Limits.

5.2.1
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Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14598-BS	L0027666.D	1	07/02/19	AA	07/02/19	OP14598	EL734
OP14598-BSD	L0027667.D	1	07/02/19	AA	07/02/19	OP14598	EL734

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	5	5.0	100	5.1	102	2	48-123/17
120-83-2	2,4-Dichlorophenol	5	5.0	100	5.2	104	4	52-135/17
105-67-9	2,4-Dimethylphenol	5	4.5	90	4.7	94	4	47-132/21
51-28-5	2,4-Dinitrophenol	25	20.8	83	22.5	90	8	32-139/25
100-02-7	4-Nitrophenol	25	16.5	66	16.6	66	1	15-105/22
87-86-5	Pentachlorophenol	25	24.0	96	24.8	99	3	51-131/19
108-95-2	Phenol	5	3.8	76	3.9	78	3	19-92/23
58-90-2	2,3,4,6-Tetrachlorophenol	5	4.2	84	4.3	86	2	57-136/19
95-95-4	2,4,5-Trichlorophenol	5	4.8	96	4.8	96	0	51-143/17
88-06-2	2,4,6-Trichlorophenol	5	4.4	88	4.6	92	4	59-132/19
83-32-9	Acenaphthene	5	4.5	90	4.7	94	4	50-120/16
208-96-8	Acenaphthylene	5	5.0	100	4.9	98	2	48-126/16
62-53-3	Aniline	5	4.0	80	4.2	84	5	10-112/50
120-12-7	Anthracene	5	4.9	98	4.8	96	2	53-128/16
56-55-3	Benzo(a)anthracene	5	5.3	106	5.4	108	2	54-129/19
50-32-8	Benzo(a)pyrene	5	4.5	90	4.5	90	0	55-135/19
205-99-2	Benzo(b)fluoranthene	5	5.5	110	5.4	108	2	54-139/23
207-08-9	Benzo(k)fluoranthene	5	5.3	106	5.2	104	2	58-132/22
92-52-4	1,1'-Biphenyl	5	4.6	92	4.7	94	2	44-127/17
85-68-7	Butyl Benzyl Phthalate	5	5.0	100	5.1	102	2	63-141/20
106-47-8	4-Chloroaniline	5	4.1	82	4.1	82	0	19-126/38
111-44-4	bis(2-Chloroethyl)ether	5	5.1	102	5.2	104	2	45-123/17
108-60-1	2,2'-Oxybis(1-chloropropane)	5	4.6	92	4.7	94	2	29-126/17
91-58-7	2-Chloronaphthalene	5	4.5	90	4.5	90	0	44-123/20
218-01-9	Chrysene	5	4.9	98	4.9	98	0	57-127/20
53-70-3	Dibenzo(a,h)anthracene	5	4.7	94	4.7	94	0	58-141/21
132-64-9	Dibenzofuran	5	4.7	94	4.8	96	2	48-126/17
91-94-1	3,3'-Dichlorobenzidine	5	9.0	180	9.7	194* a	7	10-188/40
84-66-2	Diethyl Phthalate	5	4.6	92	4.7	94	2	54-133/17
131-11-3	Dimethyl Phthalate	5	5.2	104	5.3	106	2	56-132/17
117-84-0	Di-n-octyl Phthalate	5	5.2	104	5.1	102	2	66-139/21
99-65-0	1,3-Dinitrobenzene	25	21.8	87	22.3	89	2	64-133/16
121-14-2	2,4-Dinitrotoluene	5	4.7	94	4.7	94	0	67-132/20
606-20-2	2,6-Dinitrotoluene	5	5.2	104	5.3	106	2	56-138/20
117-81-7	bis(2-Ethylhexyl)phthalate	5	5.5	110	5.5	110	0	60-142/20
206-44-0	Fluoranthene	5	5.3	106	5.2	104	2	57-133/18

* = Outside of Control Limits.

5.2.2
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Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14598-BS	L0027666.D	1	07/02/19	AA	07/02/19	OP14598	EL734
OP14598-BSD	L0027667.D	1	07/02/19	AA	07/02/19	OP14598	EL734

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
86-73-7	Fluorene	5	5.0	100	5.1	102	2	52-125/15
118-74-1	Hexachlorobenzene	5	4.7	94	4.7	94	0	47-127/21
87-68-3	Hexachlorobutadiene	5	3.2	64	3.6	72	12	14-121/30
77-47-4	Hexachlorocyclopentadiene	5	1.6	32	1.8	36	12	10-114/31
193-39-5	Indeno(1,2,3-cd)pyrene	5	4.8	96	4.8	96	0	58-142/19
78-59-1	Isophorone	5	5.6	112	5.6	112	0	52-130/18
91-57-6	2-Methylnaphthalene	5	4.4	88	4.5	90	2	43-123/18
91-20-3	Naphthalene	5	4.5	90	4.3	86	5	45-120/16
88-74-4	2-Nitroaniline	25	22.8	91	23.0	92	1	63-132/17
99-09-2	3-Nitroaniline	25	26.8	107	26.9	108	0	31-144/23
100-01-6	4-Nitroaniline	25	28.4	114	28.0	112	1	22-154/25
98-95-3	Nitrobenzene	5	5.5	110	5.7	114	4	52-128/17
621-64-7	N-Nitroso-di-n-propylamine	5	5.7	114	5.7	114	0	48-129/20
86-30-6	N-Nitrosodiphenylamine	5	4.4	88	4.4	88	0	26-146/28
85-01-8	Phenanthrene	5	4.8	96	4.7	94	2	54-124/17
129-00-0	Pyrene	5	5.2	104	5.2	104	0	56-132/19
95-94-3	1,2,4,5-Tetrachlorobenzene	5	3.4	68	3.5	70	3	33-121/24
120-82-1	1,2,4-Trichlorobenzene	5	3.9	78	4.1	82	5	34-118/23

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	77%	75%	25-101%
4165-62-2	Phenol-d5	73%	73%	17-79%
118-79-6	2,4,6-Tribromophenol	96%	95%	40-144%
4165-60-0	Nitrobenzene-d5	102%	106%	40-124%
321-60-8	2-Fluorobiphenyl	97%	94%	27-124%
1718-51-0	Terphenyl-d14	113%	112%	45-140%

(a) Outside control limits biased high. Analyte not detected in associated samples.

* = Outside of Control Limits.

5.2.2
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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14575-MS	L0027607.D	1	07/01/19	AA	06/28/19	OP14575	EL732
OP14575-MSD	L0027608.D	1	07/01/19	AA	06/28/19	OP14575	EL732
LA55613-5	L0027613.D	1	07/01/19	AA	06/28/19	OP14575	EL732

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-1, LA55743-2

CAS No.	Compound	LA55613-5 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND	4.55	3.9	86	4.42	3.7	84	5	47-126/30
120-83-2	2,4-Dichlorophenol	0.10	4.55	4.4	95	4.42	4.1	90	7	49-137/30
105-67-9	2,4-Dimethylphenol	ND	4.55	3.5	77	4.42	3.1	70	12	49-123/30
51-28-5	2,4-Dinitrophenol	ND	22.7	18.7	82	22.1	18.5	84	1	37-146/31
100-02-7	4-Nitrophenol	ND	22.7	12.1	53	22.1	11.5	52	5	19-97/39
87-86-5	Pentachlorophenol	ND	22.7	21.4	94	22.1	20.2	91	6	46-146/33
108-95-2	Phenol	ND	4.55	2.3	51	4.42	2.2	50	4	20-87/37
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.55	3.4	75	4.42	3.4	77	0	61-137/28
95-95-4	2,4,5-Trichlorophenol	ND	4.55	3.8	84	4.42	3.8	86	0	61-133/31
88-06-2	2,4,6-Trichlorophenol	ND	4.55	3.6	79	4.42	3.5	79	3	61-133/29
83-32-9	Acenaphthene	ND	4.55	3.8	84	4.42	3.8	86	0	43-122/27
208-96-8	Acenaphthylene	ND	4.55	4.0	88	4.42	4.0	90	0	48-121/29
62-53-3	Aniline	ND	4.55	2.9	64	4.42	3.0	68	3	10-110/54
120-12-7	Anthracene	0.10	4.55	4.1	88	4.42	3.8	84	8	46-137/40
56-55-3	Benzo(a)anthracene	ND	4.55	4.5	99	4.42	4.2	95	7	54-130/30
50-32-8	Benzo(a)pyrene	ND	4.55	3.6	79	4.42	3.5	79	3	60-129/31
205-99-2	Benzo(b)fluoranthene	ND	4.55	4.5	99	4.42	4.3	97	5	56-136/34
207-08-9	Benzo(k)fluoranthene	ND	4.55	4.2	92	4.42	4.1	93	2	53-138/33
92-52-4	1,1'-Biphenyl	ND	4.55	3.8	84	4.42	3.8	86	0	40-126/29
85-68-7	Butyl Benzyl Phthalate	ND	4.55	4.2	92	4.42	4.0	90	5	63-144/45
106-47-8	4-Chloroaniline	ND	4.55	2.9	64	4.42	2.9	66	0	10-122/53
111-44-4	bis(2-Chloroethyl)ether	ND	4.55	3.9	86	4.42	3.8	86	3	30-135/31
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	4.55	3.6	79	4.42	3.5	79	3	22-130/34
91-58-7	2-Chloronaphthalene	ND	4.55	3.7	81	4.42	3.8	86	3	43-117/25
218-01-9	Chrysene	ND	4.55	4.1	90	4.42	3.9	88	5	57-126/31
53-70-3	Dibenzo(a,h)anthracene	ND	4.55	3.8	84	4.42	3.6	81	5	51-142/33
132-64-9	Dibenzofuran	ND	4.55	3.8	84	4.42	3.8	86	0	34-142/28
91-94-1	3,3'-Dichlorobenzidine	ND	4.55	2.1	46	4.42	2.0	45	5	10-126/44
84-66-2	Diethyl Phthalate	0.047	4.55	3.7	80	4.42	3.7	83	0	53-130/37
131-11-3	Dimethyl Phthalate	ND	4.55	4.2	92	4.42	4.1	93	2	53-134/32
117-84-0	Di-n-octyl Phthalate	ND	4.55	4.3	95	4.42	4.2	95	2	62-142/42
99-65-0	1,3-Dinitrobenzene	ND	22.7	17.8	78	22.1	17.7	80	1	60-132/29
121-14-2	2,4-Dinitrotoluene	ND	4.55	3.7	81	4.42	3.8	86	3	65-132/36
606-20-2	2,6-Dinitrotoluene	ND	4.55	4.3	95	4.42	4.2	95	2	60-130/31
117-81-7	bis(2-Ethylhexyl)phthalate	0.19	4.55	4.4	93	4.42	4.3	93	2	52-152/38
206-44-0	Fluoranthene	ND	4.55	4.4	97	4.42	4.1	93	7	46-144/45

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14575-MS	L0027607.D	1	07/01/19	AA	06/28/19	OP14575	EL732
OP14575-MSD	L0027608.D	1	07/01/19	AA	06/28/19	OP14575	EL732
LA55613-5	L0027613.D	1	07/01/19	AA	06/28/19	OP14575	EL732

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-1, LA55743-2

CAS No.	Compound	LA55613-5 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
86-73-7	Fluorene	ND	4.55	4.0	88	4.42	4.0	90	0	50-122/27
118-74-1	Hexachlorobenzene	ND	4.55	4.0	88	4.42	3.8	86	5	34-132/35
87-68-3	Hexachlorobutadiene	ND	4.55	2.9	64	4.42	3.0	68	3	13-110/43
77-47-4	Hexachlorocyclopentadiene	ND	4.55	1.7	37	4.42	1.8	41	6	10-100/53
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.55	3.8	84	4.42	3.6	81	5	54-139/32
78-59-1	Isophorone	ND	4.55	4.5	99	4.42	4.2	95	7	54-125/30
91-57-6	2-Methylnaphthalene	ND	4.55	3.8	84	4.42	3.7	84	3	39-121/30
91-20-3	Naphthalene	0.026	4.55	3.6	79	4.42	3.7	83	3	39-122/27
88-74-4	2-Nitroaniline	ND	22.7	18.7	82	22.1	18.3	83	2	59-133/30
99-09-2	3-Nitroaniline	ND	22.7	21.1	93	22.1	21.2	96	0	17-135/33
100-01-6	4-Nitroaniline	ND	22.7	20.7	91	22.1	20.9	94	1	12-133/46
98-95-3	Nitrobenzene	ND	4.55	4.7	103	4.42	4.6	104	2	44-141/28
621-64-7	N-Nitroso-di-n-propylamine	ND	4.55	4.2	92	4.42	4.0	90	5	37-139/30
86-30-6	N-Nitrosodiphenylamine	ND	4.55	2.3	51	4.42	1.8	41	24	38-134/29
85-01-8	Phenanthrene	ND	4.55	3.9	86	4.42	3.7	84	5	37-135/36
129-00-0	Pyrene	ND	4.55	4.2	92	4.42	4.0	90	5	44-142/37
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	4.55	3.0	66	4.42	3.1	70	3	30-114/31
120-82-1	1,2,4-Trichlorobenzene	ND	4.55	3.4	75	4.42	3.4	77	0	30-114/31

CAS No.	Surrogate Recoveries	MS	MSD	LA55613-5	Limits
367-12-4	2-Fluorophenol	59%	59%	61%	25-101%
4165-62-2	Phenol-d5	50%	50%	49%	17-79%
118-79-6	2,4,6-Tribromophenol	85%	86%	86%	40-144%
4165-60-0	Nitrobenzene-d5	97%	96%	84%	40-124%
321-60-8	2-Fluorobiphenyl	87%	89%	80%	27-124%
1718-51-0	Terphenyl-d14	99%	97%	102%	45-140%

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14598-MS	L0027673.D	1	07/02/19	AA	07/02/19	OP14598	EL734
OP14598-MSD	L0027674.D	1	07/02/19	AA	07/02/19	OP14598	EL734
LA55707-6	L0027675.D	1	07/02/19	AA	07/02/19	OP14598	EL734

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	LA55707-6 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND	4.63	4.6	99	4.55	4.7	103	2	47-126/30
120-83-2	2,4-Dichlorophenol	ND	4.63	4.6	99	4.55	4.7	103	2	49-137/30
105-67-9	2,4-Dimethylphenol	ND	4.63	4.2	91	4.55	4.2	92	0	49-123/30
51-28-5	2,4-Dinitrophenol	ND	23.1	20.4	88	22.7	21.7	95	6	37-146/31
100-02-7	4-Nitrophenol	ND	23.1	12.7	55	22.7	13.3	59	5	19-97/39
87-86-5	Pentachlorophenol	ND	23.1	23.8	103	22.7	24.1	106	1	46-146/33
108-95-2	Phenol	0.056	4.63	2.9	61	4.55	2.8	60	4	20-87/37
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.63	4.0	86	4.55	4.2	92	5	61-137/28
95-95-4	2,4,5-Trichlorophenol	ND	4.63	4.3	93	4.55	4.8	106	11	61-133/31
88-06-2	2,4,6-Trichlorophenol	ND	4.63	4.2	91	4.55	4.4	97	5	61-133/29
83-32-9	Acenaphthene	ND	4.63	4.3	93	4.55	4.6	101	7	43-122/27
208-96-8	Acenaphthylene	ND	4.63	4.6	99	4.55	5.0	110	8	48-121/29
62-53-3	Aniline	ND	4.63	6.4	138* a	4.55	6.8	150* a	6	10-110/54
120-12-7	Anthracene	ND	4.63	4.5	97	4.55	4.7	103	4	46-137/40
56-55-3	Benzo(a)anthracene	ND	4.63	5.0	108	4.55	5.1	112	2	54-130/30
50-32-8	Benzo(a)pyrene	ND	4.63	4.2	91	4.55	4.4	97	5	60-129/31
205-99-2	Benzo(b)fluoranthene	ND	4.63	5.0	108	4.55	5.2	114	4	56-136/34
207-08-9	Benzo(k)fluoranthene	ND	4.63	4.9	106	4.55	5.1	112	4	53-138/33
92-52-4	1,1'-Biphenyl	ND	4.63	4.4	95	4.55	4.7	103	7	40-126/29
85-68-7	Butyl Benzyl Phthalate	0.056	4.63	4.9	105	4.55	4.9	107	0	63-144/45
106-47-8	4-Chloroaniline	ND	4.63	3.4	73	4.55	4.0	88	16	10-122/53
111-44-4	bis(2-Chloroethyl)ether	ND	4.63	5.1	110	4.55	5.0	110	2	30-135/31
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	4.63	4.4	95	4.55	4.3	95	2	22-130/34
91-58-7	2-Chloronaphthalene	ND	4.63	4.2	91	4.55	4.5	99	7	43-117/25
218-01-9	Chrysene	ND	4.63	4.6	99	4.55	4.7	103	2	57-126/31
53-70-3	Dibenzo(a,h)anthracene	ND	4.63	4.4	95	4.55	4.5	99	2	51-142/33
132-64-9	Dibenzofuran	ND	4.63	4.4	95	4.55	4.8	106	9	34-142/28
91-94-1	3,3'-Dichlorobenzidine	ND	4.63	6.2	134* a	4.55	8.2	180* a	28	10-126/44
84-66-2	Diethyl Phthalate	0.057	4.63	4.3	92	4.55	4.5	98	5	53-130/37
131-11-3	Dimethyl Phthalate	ND	4.63	4.8	104	4.55	5.1	112	6	53-134/32
117-84-0	Di-n-octyl Phthalate	ND	4.63	4.8	104	4.55	5.0	110	4	62-142/42
99-65-0	1,3-Dinitrobenzene	ND	23.1	20.5	89	22.7	21.8	96	6	60-132/29
121-14-2	2,4-Dinitrotoluene	ND	4.63	4.4	95	4.55	4.6	101	4	65-132/36
606-20-2	2,6-Dinitrotoluene	ND	4.63	4.9	106	4.55	5.4	119	10	60-130/31
117-81-7	bis(2-Ethylhexyl)phthalate	1.5	4.63	7.1	121	4.55	6.2	103	14	52-152/38
206-44-0	Fluoranthene	0.010	4.63	4.9	106	4.55	5.0	110	2	46-144/45

* = Outside of Control Limits.

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14598-MS	L0027673.D	1	07/02/19	AA	07/02/19	OP14598	EL734
OP14598-MSD	L0027674.D	1	07/02/19	AA	07/02/19	OP14598	EL734
LA55707-6	L0027675.D	1	07/02/19	AA	07/02/19	OP14598	EL734

The QC reported here applies to the following samples:

Method: SW846 8270D

LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	LA55707-6 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
86-73-7	Fluorene	ND	4.63	4.7	102	4.55	5.0	110	6	50-122/27
118-74-1	Hexachlorobenzene	ND	4.63	4.2	91	4.55	4.4	97	5	34-132/35
87-68-3	Hexachlorobutadiene	ND	4.63	3.1	67	4.55	3.6	79	15	13-110/43
77-47-4	Hexachlorocyclopentadiene	ND	4.63	1.7	37	4.55	2.1	46	21	10-100/53
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.63	4.4	95	4.55	4.5	99	2	54-139/32
78-59-1	Isophorone	ND	4.63	5.1	110	4.55	5.2	114	2	54-125/30
91-57-6	2-Methylnaphthalene	ND	4.63	4.2	91	4.55	4.4	97	5	39-121/30
91-20-3	Naphthalene	0.031	4.63	4.3	92	4.55	4.6	101	7	39-122/27
88-74-4	2-Nitroaniline	ND	23.1	21.4	92	22.7	22.8	100	6	59-133/30
99-09-2	3-Nitroaniline	ND	23.1	24.1	104	22.7	26.2	115	8	17-135/33
100-01-6	4-Nitroaniline	ND	23.1	22.8	98	22.7	25.1	110	10	12-133/46
98-95-3	Nitrobenzene	ND	4.63	5.3	114	4.55	5.5	121	4	44-141/28
621-64-7	N-Nitroso-di-n-propylamine	ND	4.63	5.5	119	4.55	5.1	112	8	37-139/30
86-30-6	N-Nitrosodiphenylamine	ND	4.63	3.7	80	4.55	3.9	86	5	38-134/29
85-01-8	Phenanthrene	ND	4.63	4.5	97	4.55	4.6	101	2	37-135/36
129-00-0	Pyrene	ND	4.63	5.0	108	4.55	5.1	112	2	44-142/37
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	4.63	3.1	67	4.55	3.6	79	15	30-114/31
120-82-1	1,2,4-Trichlorobenzene	ND	4.63	3.7	80	4.55	4.1	90	10	30-114/31

CAS No.	Surrogate Recoveries	MS	MSD	LA55707-6	Limits
367-12-4	2-Fluorophenol	72%	70%	60%	25-101%
4165-62-2	Phenol-d5	63%	60%	52%	17-79%
118-79-6	2,4,6-Tribromophenol	100%	102%	82%	40-144%
4165-60-0	Nitrobenzene-d5	106%	113%	83%	40-124%
321-60-8	2-Fluorobiphenyl	95%	103%	77%	27-124%
1718-51-0	Terphenyl-d14	94%	90%	96%	45-140%

(a) Outside control limits.

* = Outside of Control Limits.

5.3.2
5

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: LA55743
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC2233-MB1	LC043626.D	1	06/28/19	CP	n/a	n/a	GLC2233

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

LA55743-2, LA55743-3, LA55743-4, LA55743-5

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	30	ug/l	
	Aliphatics > C8-C10 (Unadj.)	10.5	50	ug/l	J
	Aromatics > C8-C10 (Unadj.)	11.1	50	ug/l	J

CAS No.	Surrogate Recoveries	Limits
615-59-8	2,5-Dibromotoluene	94% ^a 70-130%
615-59-8	2,5-Dibromotoluene	88% ^b 70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC2235-MB3	LC043678.D	1	06/29/19	CP	n/a	n/a	GLC2235

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

LA55743-1, LA55743-11

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	30	ug/l	
	Aliphatics > C8-C10 (Unadj.)	ND	50	ug/l	
	Aromatics > C8-C10 (Unadj.)	ND	50	ug/l	

CAS No.	Surrogate Recoveries		Limits
615-59-8	2,5-Dibromotoluene	98% ^a	70-130%
615-59-8	2,5-Dibromotoluene	92% ^b	70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

6.12
6

Method Blank Summary

Job Number: LA55743
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC2239-MB2	LC043807.D	1	07/01/19	NN	n/a	n/a	GLC2239

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

LA55743-6, LA55743-7, LA55743-8, LA55743-9, LA55743-10, LA55743-12, LA55743-13

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics C6-C8 (Unadj.)	ND	30	ug/l	
	Aliphatics > C8-C10 (Unadj.)	10.1	50	ug/l	J
	Aromatics > C8-C10 (Unadj.)	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Limits
615-59-8	2,5-Dibromotoluene	82% ^a 70-130%
615-59-8	2,5-Dibromotoluene	76% ^b 70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

Method Blank Summary

Job Number: LA55743
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14640-MB	LM001756.D	1	07/08/19	PC	07/08/19	OP14640	GLM43

The QC reported here applies to the following samples: Method: SW846 8011

LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.020	ug/l	

CAS No.	Surrogate Recoveries	Limits
348-51-6	1-Chloro-2-fluorobenzene	98% 60-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC2233-BS1	LC043624.D	1	06/28/19	CP	n/a	n/a	GLC2233
GLC2233-BSD1	LC043625.D	1	06/28/19	CP	n/a	n/a	GLC2233

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

LA55743-2, LA55743-3, LA55743-4, LA55743-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	150	168	112	165	110	2	70-130/30
	Aliphatics > C8-C10 (Unadj.)	250	297	119	293	117	1	70-130/30
	Aromatics > C8-C10 (Unadj.)	250	285	114	281	112	1	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	112% ^a	110% ^a	70-130%
615-59-8	2,5-Dibromotoluene	106% ^b	105% ^b	70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC2235-BS2	LC043673.D	1	06/29/19	CP	n/a	n/a	GLC2235
GLC2235-BSD2	LC043674.D	1	06/29/19	CP	n/a	n/a	GLC2235

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

LA55743-1, LA55743-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	150	166	111	170	113	2	70-130/30
	Aliphatics > C8-C10 (Unadj.)	250	295	118	299	120	1	70-130/30
	Aromatics > C8-C10 (Unadj.)	250	282	113	284	114	1	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	110% ^a	105% ^a	70-130%
615-59-8	2,5-Dibromotoluene	105% ^b	100% ^b	70-130%

- (a) Recovery from Aliphatics fraction.
- (b) Recovery from Aromatics fraction.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC2239-BS1	LC043802.D	1	07/01/19	NN	n/a	n/a	GLC2239
GLC2239-BSD1	LC043803.D	1	07/01/19	NN	n/a	n/a	GLC2239

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

LA55743-6, LA55743-7, LA55743-8, LA55743-9, LA55743-10, LA55743-12, LA55743-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	150	175	117	184	123	5	70-130/30
	Aliphatics > C8-C10 (Unadj.)	250	306	122	303	121	1	70-130/30
	Aromatics > C8-C10 (Unadj.)	250	281	112	282	113	0	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	104% ^a	102% ^a	70-130%
615-59-8	2,5-Dibromotoluene	98% ^b	96% ^b	70-130%

(a) Recovery from Aliphatics fraction.
 (b) Recovery from Aromatics fraction.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14640-BS	LM001757.D	1	07/08/19	PC	07/08/19	OP14640	GLM43
OP14640-BSD	LM001758.D	1	07/08/19	PC	07/08/19	OP14640	GLM43

The QC reported here applies to the following samples:

Method: SW846 8011

LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	0.251	0.25	99	0.26	103	4	73-140/16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
348-51-6	1-Chloro-2-fluorobenzene	98%	103%	60-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA55582-10MS	LC043660.D	50	06/28/19	CP	n/a	n/a	GLC2233
LA55582-10MSD	LC043661.D	50	06/28/19	CP	n/a	n/a	GLC2233
LA55582-10	LC043648.D	20	06/28/19	CP	n/a	n/a	GLC2233

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

LA55743-2, LA55743-3, LA55743-4, LA55743-5

CAS No.	Compound	LA55582-10 Spike		MS	MS	Spike	MSD	MSD	RPD	Limits
		ug/l	Q ug/l	ug/l	%	ug/l	ug/l	%		Rec/RPD
	Aliphatics C6-C8 (Unadj.)	30800	7500	45600	197* a	7500	40600	131* a	12	70-130/50
	Aliphatics > C8-C10 (Unadj.)	1170	12500	16200	120	12500	15200	112	6	70-130/50
	Aromatics > C8-C10 (Unadj.)	1120	12500	15700	117	12500	14500	107	8	70-130/50

CAS No.	Surrogate Recoveries	MS	MSD	LA55582-10	Limits
615-59-8	2,5-Dibromotoluene	124% b	107% b	101% b	70-130%
615-59-8	2,5-Dibromotoluene	114% c	99% c	91% c	70-130%

(a) Outside control limits due to high level in sample relative to spike amount.

(b) Recovery from Aliphatics fraction.

(c) Recovery from Aromatics fraction.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA55743-1MS	LC043688.D	20	06/29/19	CP	n/a	n/a	GLC2235
LA55743-1MSD	LC043689.D	20	06/29/19	CP	n/a	n/a	GLC2235
LA55743-1	LC043687.D	1	06/29/19	CP	n/a	n/a	GLC2235

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

LA55743-1, LA55743-11

CAS No.	Compound	LA55743-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	169	3000	3410	108	3000	3210	101	6	70-130/50
	Aliphatics > C8-C10 (Unadj.)	66.4	5000	5930	117	5000	5780	114	3	70-130/50
	Aromatics > C8-C10 (Unadj.)	68.0	5000	5720	113	5000	5580	110	2	70-130/50

CAS No.	Surrogate Recoveries	MS	MSD	LA55743-1	Limits
615-59-8	2,5-Dibromotoluene	109% ^a	103% ^a	119% ^a	70-130%
615-59-8	2,5-Dibromotoluene	105% ^b	99% ^b	111% ^b	70-130%

(a) Recovery from Aliphatics fraction.

(b) Recovery from Aromatics fraction.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA55720-3MS	LC043818.D	50	07/01/19	NN	n/a	n/a	GLC2239
LA55720-3MSD	LC043819.D	50	07/01/19	NN	n/a	n/a	GLC2239
LA55720-3	LC043817.D	10	07/01/19	NN	n/a	n/a	GLC2239

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

LA55743-6, LA55743-7, LA55743-8, LA55743-9, LA55743-10, LA55743-12, LA55743-13

CAS No.	Compound	LA55720-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	17000	7500	25800	117	7500	25300	111	2	70-130/50
	Aliphatics > C8-C10 (Unadj.)	19200	12500	33900	118	12500	33400	114	1	70-130/50
	Aromatics > C8-C10 (Unadj.)	19300	12500	34900	125	12500	33900	117	3	70-130/50

CAS No.	Surrogate Recoveries	MS	MSD	LA55720-3	Limits
615-59-8	2,5-Dibromotoluene	104% ^a	112% ^a	107% ^a	70-130%
615-59-8	2,5-Dibromotoluene	99% ^b	104% ^b	100% ^b	70-130%

(a) Recovery from Aliphatics fraction.

(b) Recovery from Aromatics fraction.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14640-MS	LM001759.D	1	07/08/19	PC	07/08/19	OP14640	GLM43
OP14640-MSD	LM001760.D	1	07/08/19	PC	07/08/19	OP14640	GLM43
LA55807-6	LM001775.D	1	07/08/19	PC	07/08/19	OP14640	GLM43

The QC reported here applies to the following samples: Method: SW846 8011

LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	LA55807-6 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.252	0.26	103	0.258	0.26	101	0	71-140/21

CAS No.	Surrogate Recoveries	MS	MSD	LA55807-6	Limits
348-51-6	1-Chloro-2-fluorobenzene	101%	100%	101%	60-140%

* = Outside of Control Limits.

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: LA55743
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14611-MB	X0010343.D	1	07/11/19	PC	07/02/19	OP14611	GLB1941

The QC reported here applies to the following samples: Method: MADEP EPH REV 1.1

LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Result	RL	Units	Q
	Aromatics > C10-C12 (Unadj.)	ND	140	ug/l	
	Aromatics > C12-C16 (Unadj.)	ND	140	ug/l	
	Aromatics > C16-C21 (Unadj.)	ND	140	ug/l	
	Aromatics > C21-C35 (Unadj.)	ND	140	ug/l	

CAS No.	Surrogate Recoveries	Results	Limits
84-15-1	o-Terphenyl	67%	40-140%
321-60-8	2-Fluorobiphenyl	71%	40-140%

7.1.1
7

Method Blank Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14611-MB	Y0010343.D	1	07/11/19	PC	07/02/19	OP14611	GLB1942

The QC reported here applies to the following samples: Method: MADEP EPH REV 1.1

LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND	140	ug/l	
	Aliphatics > C12-C16 (Unadj.)	ND	140	ug/l	
	Aliphatics > C16-C35 (Unadj.)	ND	140	ug/l	

CAS No.	Surrogate Recoveries	Results	Limits
3386-33-2	1-Chlorooctadecane	64%	40-140%

7.1.2
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14611-BS	X0010396.D	1	07/12/19	PC	07/02/19	OP14611	GLB1941
OP14611-BSD	X0010397.D	1	07/12/19	PC	07/02/19	OP14611	GLB1941

The QC reported here applies to the following samples: Method: MADEP EPH REV 1.1

LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aromatics > C10-C12 (Unadj.)	460	195	42	231	50	17	40-140/30
	Aromatics > C12-C16 (Unadj.)	1380	848	62	902	65	6	40-140/30
	Aromatics > C16-C21 (Unadj.)	2300	1590	69	1630	71	2	40-140/30
	Aromatics > C21-C35 (Unadj.)	3680	3180	86	3250	88	2	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	81%	40-140%
321-60-8	2-Fluorobiphenyl	80%	85%	40-140%

* = Outside of Control Limits.

7.2.1
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA55743
 Account: HETILAL Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14611-BS	Y0010396.D	1	07/12/19	PC	07/02/19	OP14611	GLB1942
OP14611-BSD	Y0010397.D	1	07/12/19	PC	07/02/19	OP14611	GLB1942

The QC reported here applies to the following samples: Method: MADEP EPH REV 1.1

LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics > C10-C12 (Unadj.)	460	210	46	277	60	28	40-140/30
	Aliphatics > C12-C16 (Unadj.)	919	534	58	650	70	20	40-140/30
	Aliphatics > C16-C35 (Unadj.)	4140	2230	54	2700	65	19	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
3386-33-2	1-Chlorooctadecane	63%	77%	40-140%

* = Outside of Control Limits.

7.2.2
7

Metals Analysis

QC Data Summaries



Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: LA55743
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 06/27/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	100	7.6	9.3	-10	<100
Antimony	1.0	.011	.34		
Arsenic	1.0	.066	.26	0.0022	<1.0
Barium	1.0	.023	.46	0.077	<1.0
Beryllium	1.0	.0091	.28		
Boron	20	.84	2.9		
Cadmium	0.50	.021	.12	-0.090	<0.50
Calcium	100	6.5	20	0.63	<100
Cerium	1.0	.005	.16		
Chromium	1.0	.047	.15	-0.013	<1.0
Cobalt	1.0	.013	.14		
Copper	1.0	.45	.74		
Iron	100	4.8	16	4.1	<100
Lanthanum	1.0	.0047	.41		
Lithium	2.0	.22	.61		
Lead	1.0	.011	.13	0.14	<1.0
Magnesium	100	3.3	11	12.6	<100
Manganese	2.0	.13	.53	0.38	<2.0
Molybdenum	1.0	.08	.89		
Nickel	1.0	.1	.2		
Potassium	100	4.7	7.6	32.4	<100
Selenium	5.0	.37	3.1	-0.55	<5.0
Silver	1.0	.0065	.13	-0.013	<1.0
Silicon	500	3.7	130		
Sodium	100	11	9.9	26.3	<100
Strontium	2.0	.21	.27	0.14	<2.0
Thallium	1.0	.022	.86		
Tin	2.0	.17	.19		
Titanium	1.0	.1	.77		
Uranium	1.0	.0038	.17		
Vanadium	1.0	.018	.1		
Zinc	5.0	.63	1.1	0.052	<5.0

Associated samples MP15655: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: LA55743
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 06/27/19

Metal	RL	IDL	MDL	MB raw	final
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.1.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA55743
 Account: HETILAL - Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
 Matrix Type: AQUEOUS

Methods: SW846 6020A
 Units: ug/l

Prep Date: 06/27/19

Metal	LA55743-1 Original MS	Spikelot MPICPMS6	% Rec	QC Limits	
Aluminum	0.0	5220	5100	102.4	75-125
Antimony					
Arsenic	0.0	99.9	100	99.9	75-125
Barium	269	317	100	48.0N(a)	75-125
Beryllium					
Boron					
Cadmium	0.0	99.2	100	99.2	75-125
Calcium	28800	27800	5000	-20.0(b)	75-125
Cerium					
Chromium	0.64	99.2	100	98.6	75-125
Cobalt					
Copper					
Iron	668	5720	5000	101.0	75-125
Lanthanum					
Lithium					
Lead	1.6	99.3	100	97.7	75-125
Magnesium	7410	10700	5000	65.8N(a)	75-125
Manganese	96.6	186	100	89.4	75-125
Molybdenum					
Nickel					
Potassium	5690	9470	5000	75.6	75-125
Selenium	0.0	515	500	103.0	75-125
Silver	0.0	94.2	100	94.2	75-125
Silicon					
Sodium	193000	157000	5000	-720.0(b)	75-125
Strontium	1450	1260	100	-190.0(b)	75-125
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	17.5	111	100	93.5	75-125

Associated samples MP15655: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA55743
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 06/27/19

	LA55743-1	SpikeLot	QC
Metal	Original MS	MPICPMS6 % Rec	Limits

Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference or sample non-homogeneity.
- (b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

8.1.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA55743
 Account: HETILAL - Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
 Matrix Type: AQUEOUS

Methods: SW846 6020A
 Units: ug/l

Prep Date: 06/27/19

Metal	LA55743-1 Original MSD		SpikeLot MPICPMS6	% Rec	MSD RPD	QC Limit
Aluminum	0.0	5190	5100	101.8	0.6	20
Antimony						
Arsenic	0.0	102	100	102.0	2.1	20
Barium	269	323	100	54.0N(a)	1.9	20
Beryllium						
Boron						
Cadmium	0.0	96.9	100	96.9	2.3	20
Calcium	28800	31300	5000	50.0 (b)	11.8	20
Cerium						
Chromium	0.64	104	100	103.4	4.7	20
Cobalt						
Copper						
Iron	668	8750	5000	161.6N(a)	41.9 (c)	20
Lanthanum						
Lithium						
Lead	1.6	97.3	100	95.7	2.0	20
Magnesium	7410	11100	5000	73.8N(a)	3.7	20
Manganese	96.6	215	100	118.4	14.5	20
Molybdenum						
Nickel						
Potassium	5690	9670	5000	79.6	2.1	20
Selenium	0.0	512	500	102.4	0.6	20
Silver	0.0	93.8	100	93.8	0.4	20
Silicon						
Sodium	193000	167000	5000	-520.0(b)	6.2	20
Strontium	1450	1300	100	-150.0(b)	3.1	20
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	17.5	115	100	97.5	3.5	20

Associated samples MP15655: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

8.1.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA55743
 Account: HETILAL - Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
 Matrix Type: AQUEOUS

Methods: SW846 6020A
 Units: ug/l

Prep Date: 06/27/19

Metal	LA55743-1 Original MSD	SpikeLot MPICPMS6 % Rec	MSD RPD	QC Limit
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Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference or sample non-homogeneity.
- (b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (c) Outside control limits due to matrix interference.

8.1.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: LA55743
 Account: HETILAL - Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
 Matrix Type: AQUEOUS

Methods: SW846 6020A
 Units: ug/l

Prep Date: 06/27/19

Metal	BSP Result	Spikelot MPICPMS6	% Rec	QC Limits
Aluminum	5110	5100	100.2	80-120
Antimony				
Arsenic	101	100	101.0	80-120
Barium	97.3	100	97.3	80-120
Beryllium				
Boron				
Cadmium	96.6	100	96.6	80-120
Calcium	5020	5000	100.4	80-120
Cerium				
Chromium	95.8	100	95.8	80-120
Cobalt				
Copper				
Iron	5060	5000	101.2	80-120
Lanthanum				
Lithium				
Lead	101	100	101.0	80-120
Magnesium	4660	5000	93.2	80-120
Manganese	101	100	101.0	80-120
Molybdenum				
Nickel				
Potassium	4930	5000	98.6	80-120
Selenium	546	500	109.2	80-120
Silver	88.7	100	88.7	80-120
Silicon				
Sodium	5070	5000	101.4	80-120
Strontium	102	100	102.0	80-120
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	111	100	111.0	80-120

Associated samples MP15655: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: LA55743
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 06/27/19

Metal	BSP Result	Spikelot MPICPMS6 % Rec	QC Limits
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.1.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: LA55743
 Account: HETILAL - Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
 Matrix Type: AQUEOUS

Methods: SW846 6020A
 Units: ug/l

Prep Date: 06/27/19

Metal	LA55743-1		QC	QC
	Original	SDL 10:50%DIF	Limits	Limits
Aluminum	0.00	445	NC	0-10
Antimony				
Arsenic	0.00	3.32	NC	0-10
Barium	269	264	1.8	0-10
Beryllium				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	28800	29900	4.0	0-10
Cerium				
Chromium	0.640	1410	220159.5a	0-10
Cobalt				
Copper				
Iron	668	21600	3136.5(a)	0-10
Lanthanum				
Lithium				
Lead	1.59	53.3	3261.5(a)	0-10
Magnesium	7410	6980	5.8	0-10
Manganese	96.6	306	216.4*(b)	0-10
Molybdenum				
Nickel				
Potassium	5690	5720	0.6	0-10
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Silicon				
Sodium	193000	160000	17.2*(b)	0-10
Strontium	1450	1260	13.1*(b)	0-10
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	17.5	2470	14001.8a	0-10

Associated samples MP15655: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

SERIAL DILUTION RESULTS SUMMARY

Login Number: LA55743
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 06/27/19

Metal	LA55743-1 Original SDL 10:50%DIF	QC Limits
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Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (anr) Analyte not requested
- (a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- (b) Serial dilution indicates possible matrix interference.

8.1.4

8

POST DIGESTATE SPIKE SUMMARY

Login Number: LA55743
 Account: HETILAL - Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15655
 Matrix Type: AQUEOUS

Methods: SW846 6020A
 Units: ug/l

Prep Date:

06/27/19

Metal	Sample ml	Final ml	LA55743-1 Raw	PS Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Antimony										
Barium	0.2	10	269.2	5.384	109.8	0.1	10	100	104.4	75-125
Beryllium										
Boron										
Cerium										
Cobalt										
Copper										
Iron	0.2	10	667.7	13.354	5257	0.025	2000	5000	104.9	75-125
Lanthanum										
Lithium										
Magnesium	0.2	10	7408	148.16	5387	0.025	2000	5000	104.8	75-125
Molybdenum										
Nickel										
Silicon										
Thallium										
Tin										
Titanium										
Uranium										
Vanadium										

Associated samples MP15655: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

8.1.5
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: LA55743
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15666
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 07/01/19

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.056	.081	0.019	<0.20

Associated samples MP15666: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA55743
 Account: HETILAL - Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15666
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 07/01/19

Metal	LA55743-1F Original MS	SpikeLot HGSPIKE1 % Rec	QC Limits
Mercury	0.0 5.4	5	108.0 75-125

Associated samples MP15666: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.2.2
 8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA55743
 Account: HETILAL - Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15666
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 07/01/19

Metal	LA55743-1F Original MSD	Spikelot HGSPIKE1	% Rec	MSD RPD	QC Limit
Mercury	0.0	5.2	5	104.0	3.8 20

Associated samples MP15666: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.2.2
 8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: LA55743
 Account: HETILAL - Hydro-Environmental Technology, Inc.
 Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15666
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 07/01/19

Metal	BSP Result	Spikelot HGSPIKE1	% Rec	QC Limits
Mercury	5.1	5	102.0	80-120

Associated samples MP15666: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.2.3
 8

SERIAL DILUTION RESULTS SUMMARY

Login Number: LA55743
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP15666
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 07/01/19

Metal	LA55743-1F	Original	SDL 1:5	%DIF	QC	Limits
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Mercury 0.00 0.00 NC 0-

Associated samples MP15666: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7, LA55743-1F, LA55743-2F, LA55743-3F, LA55743-4F, LA55743-5F, LA55743-6F, LA55743-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Misc. Forms

Custody Documents and Other Forms

(SGS Houston, TX)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

TX

COOL 5

FED-EX Tracking # _____ Bottle Order Control # _____

SGS Quote # _____ SGS Job # **LA55743**

500 Ambassador Caffery Parkway, Scott, LA 70583
 Phone 800-304-5227 Fax 337-237-7838

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)										Matrix Codes			
Company Name SGS North America Inc.		Project Name 8060.00 Indigo-Desoto Parish, LA		.BROCI0956.CH.LIC0956.SCON.BIL.S04IC0956.TDS .XCARBICALK										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank			
Street Address 500 Ambassador Caffery Parkway		Street 8060.00 Indigo-Desoto Parish, LA															
City State Zip Scott LA 70583		City State Scott LA 70583															
Project Contact ralph.frye@sgs.com		Project #															
Phone # 800-304-5227		Client Purchase Order #															
Sampler(s) Name(s)		Project Manager															
Attention		Street Address															
SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	MEOH	INCO	INCO2	INCO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	031-262 (MASON WATER WELL)		6/24/19	12:00:00 PM	AQ												X
2	031-9769Z (BRYANT WATER WELL)		6/24/19	5:40:00 PM	AQ												X
3	031-9843Z (PAUL DVIS WATER WELL)		6/25/19	9:20:00 AM	AQ												X
4	031-9313Z (MCCLARY 235' WATER W)		6/25/19	3:40:00 PM	AQ												X
5	031-9435Z (MCCLARY 260' WATER W)		6/25/19	3:50:00 PM	AQ												X
6	031-9342Z (MCCLARY 300' WATER W)		6/25/19	4:25:00 PM	AQ												X
7	031-5124Z (SMITH WATER WELL)		6/28/19	1:40:00 PM	AQ												X

Turnaround Time (Business days)		Data Deliverable Information										Comments / Special Instructions		
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 7/8/2019 <small>Emergency & Rush T/A data available VIA Lablink</small>		Approved By (SGS PM): / Date:		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> TRRP <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> Other <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C" X COMMB <small>Commercial "A" = Results Only Commercial "B" = Results + QC Summary</small>										7-500ml only

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished By: <i>Ralph Frye</i>	Date/Time: 6-27-19	Received By: <i>Wich Allen</i>	Relinquished By: <i>Wich Allen</i>	Date/Time: 6-27-19	Received By: <i>Genzi</i>
Relinquished by Sampler:	Date/Time: 6-27-19	Received By: <i>Genzi - Pitarsha</i>	Relinquished By: <i>Genzi</i>	Date/Time: 6-27-19	Received By: <i>Paul / 6/27/19</i>
Relinquished by:	Date/Time:	Received By:	Custody Seal #	<input type="checkbox"/> Intact <input type="checkbox"/> Preserved where applicable	<input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp.



9.1
9

SGS Sample Receipt Summary

Job Number: LA55743 **Client:** SGS **Project:** 8060
Date / Time Received: 6/27/2019 **Delivery Method:** _____ **Airbill #'s:** _____
No. Coolers: 1 **Therm ID:** IR-4; **Temp Adjustment Factor:** 0;
Cooler Temps (Initial/Adjusted): #1: (2.1/2.1);

Cooler Security	<u>Y or N</u>		<u>Y or N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/> <input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>
Cooler Temperature	<u>Y or N</u>		
1. Temp criteria achieved:	<input checked="" type="checkbox"/> <input type="checkbox"/>		
2. Cooler temp verification:	_____		
3. Cooler media:	Ice (Bag)		
Quality Control Preservation	<u>Y or N</u>	<u>N/A</u>	<u>WTB STB</u>
1. Trip Blank present / cooler:	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/> <input type="checkbox"/>		
4. VOCs headspace free:	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/>	

Sample Integrity - Documentation	<u>Y or N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/> <input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/> <input type="checkbox"/>
Sample Integrity - Condition	<u>Y or N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/> <input type="checkbox"/>
3. Condition of sample:	Intact
Sample Integrity - Instructions	<u>Y or N</u> <u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Bottles received for unspecified tests	<input type="checkbox"/> <input checked="" type="checkbox"/>
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/> <input type="checkbox"/>
4. Compositing instructions clear:	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>

Comments

9.1
9

Sample Receipt Log

Job #: LA55743 _____

Date / Time Received: 6/27/2019 11:55:00 PM _____

Initials: bg _____

Client: SGS _____

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	LA55743-1	500ml	1	M3E	N/P	Note #2 - Preservative check not applicable.	IR-4	2.1	0	2.1
1	LA55743-2	500ml	1	M3E	N/P	Note #2 - Preservative check not applicable.	IR-4	2.1	0	2.1
1	LA55743-3	500ml	1	M3E	N/P	Note #2 - Preservative check not applicable.	IR-4	2.1	0	2.1
1	LA55743-4	500ml	1	M3E	N/P	Note #2 - Preservative check not applicable.	IR-4	2.1	0	2.1
1	LA55743-5	500ml	1	M3E	N/P	Note #2 - Preservative check not applicable.	IR-4	2.1	0	2.1
1	LA55743-6	500ml	1	M3E	N/P	Note #2 - Preservative check not applicable.	IR-4	2.1	0	2.1
1	LA55743-7	500ml	1	M3E	N/P	Note #2 - Preservative check not applicable.	IR-4	2.1	0	2.1

9.1
9

LA55743: Chain of Custody
Page 3 of 3

General Chemistry

QC Data Summaries

(SGS Houston, TX)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: LA55743
Account: ALLA - SGS Scott, LA
Project: HETILAL: 8060.00 Indigo-Desoto Parish, LA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Bicarbonate	GN99613	5.0	2.0	mg/l				
Alkalinity, Carbonate	GN99614	5.0	0.0	mg/l				
Alkalinity, Total as CaCO3	GN99612	5.0	2.0	mg/l	100	101	101.0	90-110%
Bromide	GP53818/GN99581	0.60	0.0	mg/l	10	11.0	110.0	90-110%
Chloride	GP53818/GN99581	0.70	0.0	mg/l	10	10.7	107.0	90-110%
Silica, Dissolved	GN99657	0.070	0.0	mg/l	1.07	0.99	92.5	80-120%
Solids, Total Dissolved	GN99507	10	0.0	mg/l	500	494	98.8	88-110%
Specific Conductivity	GN99586	1.0	<1.0	umhos/cm				
Sulfate	GP53818/GN99581	0.50	0.0	mg/l	10	10.9	109.0	90-110%

Associated Samples:

Batch GN99507: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GN99586: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GN99612: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GN99613: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GN99614: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GN99657: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GP53818: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

(*) Outside of QC limits

10.1
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: LA55743
Account: ALLA - SGS Scott, LA
Project: HETILAL: 8060.00 Indigo-Desoto Parish, LA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN99612	TD41398-2A	mg/l	239	239	0.0	0-10%
Bromide	GP53818/GN99581	LA55743-2	mg/l	0.0	0.0	0.0	0-19%
Chloride	GP53818/GN99581	LA55743-2	mg/l	9.5	9.5	0.0	0-13%
Silica, Dissolved	GN99657	LA55743-1	mg/l	32.7	32.2	1.5	0-20%
Solids, Total Dissolved	GN99507	LA55716-1	mg/l	390	398	2.0	0-5%
Specific Conductivity	GN99586	LA55743-1	umhos/cm	925	925	0.0	0-10%
Sulfate	GP53818/GN99581	LA55743-2	mg/l	4.7	4.8	2.1	0-20%

Associated Samples:

Batch GN99507: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GN99586: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GN99612: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GN99657: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 Batch GP53818: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7
 (*) Outside of QC limits

10.2
10

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: LA55743
Account: ALLA - SGS Scott, LA
Project: HETILAL: 8060.00 Indigo-Desoto Parish, LA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN99612	TD41398-2A	mg/l	239	25	259	80.0	75-117%
Bromide	GP53818/GN99581	LA55743-2	mg/l	0.0	10	11.7	117.0	80-120%
Chloride	GP53818/GN99581	LA55743-2	mg/l	9.5	10	21.9	124.0N	80-120%
Silica, Dissolved	GN99657	LA55743-1	mg/l	32.7	21.4	41.1	39.3N(a)	75-125%
Sulfate	GP53818/GN99581	LA55743-2	mg/l	4.7	10	16.3	116.0	80-120%

Associated Samples:

Batch GN99612: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

Batch GN99657: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

Batch GP53818: LA55743-1, LA55743-2, LA55743-3, LA55743-4, LA55743-5, LA55743-6, LA55743-7

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Outside control limits due to matrix interference

10.3
10