The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

Hydro-Environmental Technology, Inc.

8060.00 Indigo-Desoto Parish, LA

SGS Job Number: LA49190

Sampling Dates: 10/24/18 - 10/26/18

Report to:

Hydro-Environmental Technology
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Total number of pages in report: **121**

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
Lab Director

Client Service contact: Ralph Frye 337-237-4775

Certifications: LDEQ(2048), LDHH(LA150012), AR(14-045-04), AZ(AZ0805), FL(E87657), IL(200082), KY(#31), NC(487), SC(73004001), NJ(LA007), TX(T104704186-15-7), WV(257)

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SGS North America Inc.

Sample Summary

Hydro-Environmental Technology, Inc.

8060.00 Indigo-Desoto Parish, LA

Job No: LA49190

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
LA49190-1	10/24/18	16:20	LV/EM	10/26/18	AQ	Water	UNREGISTERED (P. DAVIS WATER WELL)
LA49190-1F	10/24/18	16:20	LV/EM	10/26/18	AQ	Water Filtered	UNREGISTERED (P. DAVIS WATER WELL)
LA49190-2	10/24/18	16:45	LV/EM	10/26/18	AQ	Water	031-9435Z (MCCLARY-260' WATER WELL
LA49190-2F	10/24/18	16:45	LV/EM	10/26/18	AQ	Water Filtered	031-9435Z (MCCLARY-260' WATER WELL
LA49190-3	10/25/18	12:30	LV/EM	10/26/18	AQ	Water	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)
LA49190-3F	10/25/18	12:30	LV/EM	10/26/18	AQ	Water Filtered	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)
LA49190-4	10/25/18	15:45	LV/EM	10/26/18	AQ	Water	031-9312Z (NITEN WATER WELL)
LA49190-4F	10/25/18	15:45	LV/EM	10/26/18	AQ	Water Filtered	031-9312Z (NITEN WATER WELL)
LA49190-5	10/26/18	08:30	LV/EM	10/26/18	AQ	Water	UNREGISTERED (K. SALLEY WATER WELL)
LA49190-5F	10/26/18	08:30	LV/EM	10/26/18	AQ	Water Filtered	UNREGISTERED (K. SALLEY WATER WELL)
LA49190-6	10/24/18	08:00	LV/EM	10/26/18	AQ	Trip Blank Water	TRIP BLANK
LA49190-7	10/25/18	06:30	LV/EM	10/26/18	AQ	Trip Blank Water	TRIP BLANK
LA49190-8	10/25/18	08:10	LV/EM	10/26/18	AQ	Trip Blank Water	FIELD BLANK

Sample Summary
(continued)

Hydro-Environmental Technology, Inc.

Job No: LA49190

8060.00 Indigo-Desoto Parish, LA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
LA49190-9	10/26/18	06:30	LV/EM	10/26/18	AQ	Trip Blank Water	TRIP BLANK
LA49190-10	10/26/18	07:30	LV/EM	10/26/18	AQ	Trip Blank Water	FIELD BLANK

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (P. DAVIS WATER WELL)		
Lab Sample ID:	LA49190-1	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0022596.D	1	10/31/18 00:15	JS	10/29/18 07:00	OP12646	EL593
Run #2							

	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 [a]	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	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 [a]	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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (P. DAVIS WATER WELL)		
Lab Sample ID:	LA49190-1	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	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	57%		23-85%
4165-62-2	Phenol-d5	46%		10-69%
118-79-6	2,4,6-Tribromophenol	92%		48-138%
4165-60-0	Nitrobenzene-d5	76%		51-128%
321-60-8	2-Fluorobiphenyl	82%		55-122%
1718-51-0	Terphenyl-d14	88%		43-138%

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

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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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (P. DAVIS WATER WELL)		
Lab Sample ID:	LA49190-1	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	LC381254.D	1	10/30/18 19:26	MB	n/a	n/a	GLC1885
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	107% [a]		70-130%
615-59-8	2,5-Dibromotoluene	95% [b]		70-130%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (P. DAVIS WATER WELL)		
Lab Sample ID:	LA49190-1	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113872.D	1	10/31/18 06:07	JS	10/29/18 03:50	OP12675	GLK739
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	111%		55-149%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (P. DAVIS WATER WELL)		
Lab Sample ID:	LA49190-1	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0005611.D	1	11/01/18 15:53	JT	10/30/18 07:00	OP12664	GLB1653
Run #2	Y0005611.D	1	11/01/18 15:54	JT	10/30/18 07:00	OP12664	GLB1654

	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		57%	40-140%
84-15-1	o-Terphenyl	73%		40-140%
321-60-8	2-Fluorobiphenyl	77%		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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (P. DAVIS WATER WELL)		
Lab Sample ID:	LA49190-1	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0752	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	6.51	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	1.84	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	0.0280	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	2.28	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	187	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.333	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	0.109	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (P. DAVIS WATER WELL)		
Lab Sample ID:	LA49190-1	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		Percent Solids:	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	207	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Carbonate [a]	< 5.0	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	211	5.0	mg/l	1	11/02/18 18:25	ATX	SM 2320B-2011
Bromide [a]	0.53	0.50	mg/l	1	11/07/18 18:59	ATX	SW846 9056A
Chloride [a]	70.8	2.5	mg/l	5	11/07/18 20:24	ATX	SW846 9056A
Silica, Dissolved [a]	11.4	0.70	mg/l	10	11/01/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	461	10	mg/l	1	10/31/18	ATX	SM 2540C-2011
Specific Conductivity [b]	790	1.0	umhos/cm	1	11/02/18 15:50	ATX	EPA 120.1
Sulfate [a]	63.0	2.5	mg/l	5	11/07/18 20:24	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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (P. DAVIS WATER WELL)		
Lab Sample ID:	LA49190-1F	**Date Sampled:**	10/24/18
Matrix:	AQ - Water Filtered	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0651	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	4.98	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	1.54	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	< 0.020	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	2.24	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	180	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.281	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY-260' WATER WELL		
Lab Sample ID:	LA49190-2	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0022597.D	1	10/31/18 00:40	JS	10/29/18 07:00	OP12646	EL593
Run #2							

	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 [a]	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	0.0010	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	0.00060	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	0.00061	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	0.00023	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	0.00034	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	0.00055	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	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 [a]	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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY-260' WATER WELL		
Lab Sample ID:	LA49190-2	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	0.0039	0.00018	mg/l	
86-73-7	Fluorene	0.0016	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	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	0.00092	0.00018	mg/l	
91-20-3	Naphthalene	0.0011	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	0.0064	0.00018	mg/l	
129-00-0	Pyrene	0.0024	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	54%		23-85%
4165-62-2	Phenol-d5	44%		10-69%
118-79-6	2,4,6-Tribromophenol	82%		48-138%
4165-60-0	Nitrobenzene-d5	67%		51-128%
321-60-8	2-Fluorobiphenyl	72%		55-122%
1718-51-0	Terphenyl-d14	77%		43-138%

(a) 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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY-260' WATER WELL		
Lab Sample ID:	LA49190-2	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	LC381255.D	1	10/30/18 20:10	MB	n/a	n/a	GLC1885
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	104% [a]		70-130%
615-59-8	2,5-Dibromotoluene	92% [b]		70-130%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY-260' WATER WELL		
Lab Sample ID:	LA49190-2	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113873.D	1	10/31/18 06:24	JS	10/29/18 03:50	OP12675	GLK739
Run #2							

	Initial Volume	Final Volume
Run #1	36.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	109%		55-149%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY-260' WATER WELL		
Lab Sample ID:	LA49190-2	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0005612.D	1	11/01/18 16:17	JT	10/30/18 07:00	OP12664	GLB1653
Run #2	Y0005612.D	1	11/01/18 16:18	JT	10/30/18 07:00	OP12664	GLB1654

	Initial Volume	Final Volume
Run #1	54.9 ml	4.0 ml
Run #2	54.9 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		71%	40-140%
84-15-1	o-Terphenyl	76%		40-140%
321-60-8	2-Fluorobiphenyl	82%		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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY-260' WATER WELL		
Lab Sample ID:	LA49190-2	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0219	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	1.11	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	< 0.020	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	258	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.0599	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY-260' WATER WELL		
Lab Sample ID:	LA49190-2	**Date Sampled:**	10/24/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		Percent Solids:	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	396	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Carbonate [a]	18.7	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	415	5.0	mg/l	1	11/02/18 18:25	ATX	SM 2320B-2011
Bromide [a]	0.52	0.50	mg/l	1	11/07/18 19:50	ATX	SW846 9056A
Chloride [a]	66.8	2.5	mg/l	5	11/07/18 20:40	ATX	SW846 9056A
Silica, Dissolved [a]	6.8	0.70	mg/l	10	11/01/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	729	10	mg/l	1	10/31/18	ATX	SM 2540C-2011
Specific Conductivity [b]	1110	1.0	umhos/cm	1	11/02/18 15:50	ATX	EPA 120.1
Sulfate [a]	< 0.50	0.50	mg/l	1	11/07/18 19:50	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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9435Z (MCCLARY-260' WATER WELL		
Lab Sample ID:	LA49190-2F	**Date Sampled:**	10/24/18
Matrix:	AQ - Water Filtered	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0160	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	< 0.020	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	275	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.0554	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)		
Lab Sample ID:	LA49190-3	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0022598.D	1	10/31/18 01:04	JS	10/29/18 07:00	OP12646	EL593
Run #2							

	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 [a]	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	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 [a]	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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)		
Lab Sample ID:	LA49190-3	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	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	57%		23-85%
4165-62-2	Phenol-d5	46%		10-69%
118-79-6	2,4,6-Tribromophenol	90%		48-138%
4165-60-0	Nitrobenzene-d5	71%		51-128%
321-60-8	2-Fluorobiphenyl	78%		55-122%
1718-51-0	Terphenyl-d14	85%		43-138%

(a) 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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)		
Lab Sample ID:	LA49190-3	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	LC381256.D	1	10/30/18 20:54	MB	n/a	n/a	GLC1885
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	93% [b]		70-130%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)		
Lab Sample ID:	LA49190-3	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113874.D	1	10/31/18 06:42	JS	10/29/18 03:50	OP12675	GLK739
Run #2							

	Initial Volume	Final Volume
Run #1	36.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	108%		55-149%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)		
Lab Sample ID:	LA49190-3	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0005677.D	1	11/05/18 11:17	JT	10/30/18 07:00	OP12664	GLB1657
Run #2	Y0005677.D	1	11/05/18 11:18	JT	10/30/18 07:00	OP12664	GLB1658

	Initial Volume	Final Volume
Run #1	54.5 ml	4.0 ml
Run #2	54.5 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		55%	40-140%
84-15-1	o-Terphenyl	77%		40-140%
321-60-8	2-Fluorobiphenyl	76%		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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)		
Lab Sample ID:	LA49190-3	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0240	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	3.81	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	< 0.020	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	1.18	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	313	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.0900	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)		
Lab Sample ID:	LA49190-3	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		Percent Solids:	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	454	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Carbonate [a]	16.2	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	470	5.0	mg/l	1	11/02/18 18:25	ATX	SM 2320B-2011
Bromide [a]	0.68	0.50	mg/l	1	11/07/18 20:07	ATX	SW846 9056A
Chloride [a]	119	5.0	mg/l	10	11/07/18 20:57	ATX	SW846 9056A
Silica, Dissolved [a]	6.2	0.70	mg/l	10	11/01/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	831	10	mg/l	1	10/31/18	ATX	SM 2540C-2011
Specific Conductivity [b]	1350	1.0	umhos/cm	1	11/02/18 15:50	ATX	EPA 120.1
Sulfate [a]	0.84	0.50	mg/l	1	11/07/18 20:07	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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9253Z (XTO-BAGLEY26H-1 WATER WELL)		
Lab Sample ID:	LA49190-3F	**Date Sampled:**	10/25/18
Matrix:	AQ - Water Filtered	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0255	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	< 0.020	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	1.30	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	324	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.0928	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9312Z (NITEN WATER WELL)		
Lab Sample ID:	LA49190-4	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0022599.D	1	10/31/18 01:29	JS	10/29/18 07:00	OP12646	EL593
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	0.0050	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0050	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0050	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	0.0010	mg/l	
108-95-2	Phenol	ND	0.0050	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0050	mg/l	
95-95-4	2,4,5-Trichlorophenol [a]	ND	0.0050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0050	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	0.0050	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	0.010	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0050	mg/l	
106-47-8	4-Chloroaniline	ND	0.0050	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0050	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0050	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0050	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	0.0050	mg/l	
91-94-1	3,3'-Dichlorobenzidine	ND	0.010	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0050	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0050	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0050	mg/l	
99-65-0	1,3-Dinitrobenzene [a]	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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9312Z (NITEN WATER WELL)		
Lab Sample ID:	LA49190-4	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	0.0050	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0050	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0050	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	0.0010	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.00050	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND	0.010	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.00020	mg/l	
78-59-1	Isophorone	ND	0.0050	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.00020	mg/l	
91-20-3	Naphthalene	0.00064	0.00020	mg/l	
88-74-4	2-Nitroaniline	ND	0.0050	mg/l	
99-09-2	3-Nitroaniline	ND	0.0050	mg/l	
100-01-6	4-Nitroaniline	ND	0.0050	mg/l	
98-95-3	Nitrobenzene	ND	0.0010	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0050	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0050	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	0.0010	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	58%		23-85%
4165-62-2	Phenol-d5	47%		10-69%
118-79-6	2,4,6-Tribromophenol	92%		48-138%
4165-60-0	Nitrobenzene-d5	74%		51-128%
321-60-8	2-Fluorobiphenyl	79%		55-122%
1718-51-0	Terphenyl-d14	87%		43-138%

(a) 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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9312Z (NITEN WATER WELL)		
Lab Sample ID:	LA49190-4	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	LC381257.D	1	10/30/18 21:39	MB	n/a	n/a	GLC1885
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	107% [a]		70-130%
615-59-8	2,5-Dibromotoluene	94% [b]		70-130%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9312Z (NITEN WATER WELL)		
Lab Sample ID:	LA49190-4	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113875.D	1	10/31/18 07:00	JS	10/29/18 03:50	OP12675	GLK739
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	110%		55-149%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9312Z (NITEN WATER WELL)		
Lab Sample ID:	LA49190-4	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0005614.D	1	11/01/18 17:07	JT	10/30/18 07:00	OP12664	GLB1653
Run #2	Y0005614.D	1	11/01/18 17:08	JT	10/30/18 07:00	OP12664	GLB1654

	Initial Volume	Final Volume
Run #1	55.2 ml	4.0 ml
Run #2	55.2 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		73%	40-140%
84-15-1	o-Terphenyl	73%		40-140%
321-60-8	2-Fluorobiphenyl	75%		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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9312Z (NITEN WATER WELL)		
Lab Sample ID:	LA49190-4	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0184	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	0.0201	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	246	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.0483	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9312Z (NITEN WATER WELL)		
Lab Sample ID:	LA49190-4	**Date Sampled:**	10/25/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		Percent Solids:	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	392	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Carbonate [a]	12.5	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	405	5.0	mg/l	1	11/02/18 18:25	ATX	SM 2320B-2011
Bromide [a]	0.50	0.50	mg/l	1	11/08/18 12:49	ATX	SW846 9056A
Chloride [a]	58.3	2.5	mg/l	5	11/08/18 11:25	ATX	SW846 9056A
Silica, Dissolved [a]	6.8	0.70	mg/l	10	11/01/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	627	10	mg/l	1	10/31/18	ATX	SM 2540C-2011
Specific Conductivity [b]	1060	1.0	umhos/cm	1	11/02/18 15:50	ATX	EPA 120.1
Sulfate [a]	< 0.50	0.50	mg/l	1	11/08/18 12:49	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

SGS North America Inc.

Report of Analysis

Client Sample ID:	031-9312Z (NITEN WATER WELL)		
Lab Sample ID:	LA49190-4F	**Date Sampled:**	10/25/18
Matrix:	AQ - Water Filtered	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0204	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	1.16	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	< 0.020	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	264	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.0556	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (K. SALLEY WATER WELL)		
Lab Sample ID:	LA49190-5	**Date Sampled:**	10/26/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0022600.D	1	10/31/18 01:54	JS	10/29/18 07:00	OP12646	EL593
Run #2							

	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 [a]	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	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 [a]	ND	0.0044	mg/l	

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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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (K. SALLEY WATER WELL)		
Lab Sample ID:	LA49190-5	**Date Sampled:**	10/26/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	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	53%		23-85%
4165-62-2	Phenol-d5	46%		10-69%
118-79-6	2,4,6-Tribromophenol	85%		48-138%
4165-60-0	Nitrobenzene-d5	71%		51-128%
321-60-8	2-Fluorobiphenyl	76%		55-122%
1718-51-0	Terphenyl-d14	82%		43-138%

(a) 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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (K. SALLEY WATER WELL)		
Lab Sample ID:	LA49190-5	**Date Sampled:**	10/26/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
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	LC381258.D	1	10/30/18 22:23	MB	n/a	n/a	GLC1885
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	107% [a]		70-130%
615-59-8	2,5-Dibromotoluene	94% [b]		70-130%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (K. SALLEY WATER WELL)		
Lab Sample ID:	LA49190-5	**Date Sampled:**	10/26/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113876.D	1	10/31/18 07:17	JS	10/29/18 03:50	OP12675	GLK739
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	110%		55-149%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (K. SALLEY WATER WELL)		
Lab Sample ID:	LA49190-5	**Date Sampled:**	10/26/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0005615.D	1	11/01/18 17:31	JT	10/30/18 07:00	OP12664	GLB1653
Run #2	Y0005615.D	1	11/01/18 17:32	JT	10/30/18 07:00	OP12664	GLB1654

	Initial Volume	Final Volume
Run #1	55.1 ml	4.0 ml
Run #2	55.1 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		65%	40-140%
84-15-1	o-Terphenyl	72%		40-140%
321-60-8	2-Fluorobiphenyl	78%		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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (K. SALLEY WATER WELL)		
Lab Sample ID:	LA49190-5	**Date Sampled:**	10/26/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0403	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	1.45	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	< 0.020	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	1.67	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	238	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.123	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (K. SALLEY WATER WELL)		
Lab Sample ID:	LA49190-5	**Date Sampled:**	10/26/18
Matrix:	AQ - Water	**Date Received:**	10/26/18
		Percent Solids:	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	355	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Carbonate [a]	10.3	5.0	mg/l	1	11/02/18 18:25	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	365	5.0	mg/l	1	11/02/18 18:25	ATX	SM 2320B-2011
Bromide [a]	< 0.50	0.50	mg/l	1	11/07/18 21:48	ATX	SW846 9056A
Chloride [a]	45.3	2.5	mg/l	5	11/07/18 22:05	ATX	SW846 9056A
Silica, Dissolved [a]	5.6	0.70	mg/l	10	11/01/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	553	10	mg/l	1	10/31/18	ATX	SM 2540C-2011
Specific Conductivity [b]	928	1.0	umhos/cm	1	11/02/18 15:50	ATX	EPA 120.1
Sulfate [a]	7.7	0.50	mg/l	1	11/07/18 21:48	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

SGS North America Inc.

Report of Analysis

Client Sample ID:	UNREGISTERED (K. SALLEY WATER WELL)		
Lab Sample ID:	LA49190-5F	**Date Sampled:**	10/26/18
Matrix:	AQ - Water Filtered	**Date Received:**	10/26/18
		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	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Arsenic	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Barium	0.0360	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Cadmium	< 0.0050	0.0050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Calcium	1.48	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Chromium	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Iron	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Lead	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Magnesium	< 1.0	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Manganese	< 0.020	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.00020	0.00020	mg/l	1	10/29/18	10/29/18	SA	SW846 7470A [1]	SW846 7470A [4]
Potassium	1.59	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Selenium	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Silver	< 0.010	0.010	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Sodium	239	1.0	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [3]	SW846 3010A [5]
Strontium	0.127	0.020	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]
Zinc	< 0.050	0.050	mg/l	10	10/29/18	10/30/18	RT	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA13797
(2) Instrument QC Batch: MA13798
(3) Instrument QC Batch: MA13803
(4) Prep QC Batch: MP13159
(5) Prep QC Batch: MP13172

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA49190-6	**Date Sampled:**	10/24/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I040665.D	1	10/29/18 20:03	LS	n/a	n/a	V1I1896
Run #2							

	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	
96-12-8	1,2-Dibromo-3-chloropropane	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	

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA49190-6	**Date Sampled:**	10/24/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	
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	117%		84-124%
2037-26-5	Toluene-D8	99%		83-115%
460-00-4	4-Bromofluorobenzene	92%		89-111%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA49190-6	**Date Sampled:**	10/24/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
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	LC381225.D	1	10/29/18 16:35	MB	n/a	n/a	GLC1884
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	94% [b]		70-130%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA49190-7	**Date Sampled:**	10/25/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I040667.D	1	10/29/18 20:31	LS	n/a	n/a	V1I1896
Run #2							

	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	
96-12-8	1,2-Dibromo-3-chloropropane	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	

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA49190-7	**Date Sampled:**	10/25/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	
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	120%		84-124%
2037-26-5	Toluene-D8	99%		83-115%
460-00-4	4-Bromofluorobenzene	92%		89-111%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA49190-7	**Date Sampled:**	10/25/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
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	LC381228.D	1	10/29/18 18:45	MB	n/a	n/a	GLC1884
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	106% [a]		70-130%
615-59-8	2,5-Dibromotoluene	97% [b]		70-130%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	LA49190-8	**Date Sampled:**	10/25/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I040669.D	1	10/29/18 20:59	LS	n/a	n/a	V1I1896
Run #2							

	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	
96-12-8	1,2-Dibromo-3-chloropropane	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	

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	LA49190-8	**Date Sampled:**	10/25/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	
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	120%		84-124%
2037-26-5	Toluene-D8	98%		83-115%
460-00-4	4-Bromofluorobenzene	90%		89-111%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	LA49190-8	**Date Sampled:**	10/25/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
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	LC381229.D	1	10/29/18 19:29	MB	n/a	n/a	GLC1884
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	107% [a]		70-130%
615-59-8	2,5-Dibromotoluene	98% [b]		70-130%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA49190-9	**Date Sampled:**	10/26/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q0444703.D	1	10/31/18 15:43	NN	n/a	n/a	V1Q2285
Run #2							

	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	
96-12-8	1,2-Dibromo-3-chloropropane	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	

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA49190-9	**Date Sampled:**	10/26/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	
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%		84-124%
2037-26-5	Toluene-D8	97%		83-115%
460-00-4	4-Bromofluorobenzene	104%		89-111%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA49190-9	**Date Sampled:**	10/26/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
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	LC381230.D	1	10/29/18 20:13	MB	n/a	n/a	GLC1884
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	104% [a]		70-130%
615-59-8	2,5-Dibromotoluene	96% [b]		70-130%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	LA49190-10	**Date Sampled:**	10/26/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q0444705.D	1	10/31/18 16:09	NN	n/a	n/a	V1Q2285
Run #2							

	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	
96-12-8	1,2-Dibromo-3-chloropropane	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	

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	LA49190-10	**Date Sampled:**	10/26/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 Indigo-Desoto Parish, LA		

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	0.0050	mg/l	
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	96%		84-124%
2037-26-5	Toluene-D8	96%		83-115%
460-00-4	4-Bromofluorobenzene	103%		89-111%

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	LA49190-10	**Date Sampled:**	10/26/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/26/18
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	LC381231.D	1	10/29/18 20:57	MB	n/a	n/a	GLC1884
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	95% [b]		70-130%

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

LA49190

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

SAMPLE CHAIN-OF-CUSTODY RECORD

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

Laboratory: SGS Lafayette
Collected By: LV/EM
Company: Hydro-Environmental Technology, Inc.
Date: 10/24/2018

Sample I.D.	Type	Date/Time Sampled		Containers	Analysis Requested/Method	Comments
Unregistered (P. Davis Water Well)	AQ	10/24/2018	16:20	(3) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	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	10/24/2018	16:45	(3) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals
031-9253Z (XTO-Bagley26H-1 Water Well)	AQ	10/25/2018	12:30	(3) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals
031-9312Z (Niten Water Well)	AQ	10/25/2018	15:45	(4) 40mL Glass HCl (3) 60mL Amber Glass HCl (1) Liter Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals
Unregistered (K. Salley Water Well)	AQ	10/26/2018	8:30	(3) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Silica, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals

*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:	Received By:
Date/Time: 10-26-18 1415	Date/Time: 10-26-18 1415
Relinquished By:	Received By:
Date/Time: 10-26-18 1415	Date/Time: 10-26-18 1500
Analysis Due: Verbal:	Written:

Page 1 of 2

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

LA49190

SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name:	Indigo	*Laboratory:*	SGS Lafayette
Project Number:	8060.00	*Collected By:*	LV/EM
Project Location:	DeSoto Parish, Louisiana	*Company:*	Hydro-Environmental Technology, Inc.
		Date:	10/24/2018

Sample I.D.	Type	Date/Time Sampled		Containers	Analysis Requested/Method	Comments	
1 Trip Blank	AQ	10/24/2018	8:00	(6) 40mL Glass HCl	VOC 8260, VPH	4°C	6
2 Trip Blank	AQ	10/25/2018	6:30	(6) 40mL Glass HCl	VOC 8260, VPH	4°C	6
3 Field Blank	AQ	10/25/2018	8:10	(6) 40mL Glass HCl	VOC 8260, VPH	4°C	6
4 Trip Blank	AQ	10/26/2018	6:30	(6) 40mL Glass HCl	VOC 8260, VPH	4°C	6
5 Field Blank	AQ	10/26/2018	7:30	(6) 40mL Glass HCl	VOC 8260, VPH	4°C	6

*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:	Eric Matt	Received By:	Hunter
Date/Time:	10-26-18 1415	Date/Time:	10-26-18 1415
Relinquished By:	Hunter	Received By:	Hunter
Date/Time:	10/26/18 15:20	Date/Time:	10/26/18 15:20
Analysis Due: Verbal		Written:	

LA49190: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: LA49190 **Client:** HYDRO **Project:** INDIGO

Date / Time Received: 10/26/2018 3:20:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (4/4); #2: (2.1/2.1); #3: (2.8/2.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer ID:	DV441;		
3. Cooler media:	Ice (direct contact)		
4. No. Coolers:	3		

Quality Control _Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments Time on COC for Trip Blank states 8:00 and on sample 6:30. All Trip blanks have 5 vials coc states 6.

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: LA49190
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
V1I1896-MB2	1I040653.D	1	10/29/18	LS	n/a	n/a	V1I1896

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

LA49190-6, LA49190-7, LA49190-8

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
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	
96-12-8	1,2-Dibromo-3-chloropropane	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	

Method Blank Summary

Job Number: LA49190
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
V1I1896-MB2	1I040653.D	1	10/29/18	LS	n/a	n/a	V1I1896

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

LA49190-6, LA49190-7, LA49190-8

CAS No.	Compound	Result	RL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	ug/l	
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	101%	84-124%
2037-26-5	Toluene-D8	99%	83-115%
460-00-4	4-Bromofluorobenzene	94%	89-111%

Method Blank Summary

Job Number: LA49190
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
V1Q2285-MB2	1Q0444687.D	1	10/31/18	NN	n/a	n/a	V1Q2285

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

LA49190-9, LA49190-10

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
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	
96-12-8	1,2-Dibromo-3-chloropropane	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	0.43	1.0	ug/l	J
78-93-3	Methyl Ethyl Ketone	1.1	13	ug/l	J
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	0.31	1.0	ug/l	J
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	

Method Blank Summary

Job Number: LA49190
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
V1Q2285-MB2	1Q0444687.D	1	10/31/18	NN	n/a	n/a	V1Q2285

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

LA49190-9, LA49190-10

CAS No.	Compound	Result	RL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	ug/l	
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	99%	84-124%
2037-26-5	Toluene-D8	99%	83-115%
460-00-4	4-Bromofluorobenzene	101%	89-111%

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
V1I1896-BS1	1I040647.D	1	10/29/18	LS	n/a	n/a	V1I1896
V1I1896-BSD1	1I040649.D	1	10/29/18	LS	n/a	n/a	V1I1896

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

LA49190-6, LA49190-7, LA49190-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	43.8	88	44.2	88	1	38-178/30
71-43-2	Benzene	20	19.1	96	19.6	98	3	82-119/30
75-27-4	Bromodichloromethane	20	18.4	92	19.1	96	4	79-120/30
75-25-2	Bromoform	20	15.5	78	15.9	80	3	68-128/30
75-15-0	Carbon Disulfide	20	18.3	92	19.2	96	5	64-133/30
56-23-5	Carbon Tetrachloride	20	17.7	89	18.3	92	3	69-132/30
108-90-7	Chlorobenzene	20	18.5	93	19.0	95	3	85-120/30
75-00-3	Chloroethane	20	18.6	93	19.2	96	3	33-170/30
67-66-3	Chloroform	20	17.8	89	18.6	93	4	80-122/30
124-48-1	Dibromochloromethane	20	17.3	87	17.7	89	2	73-125/30
96-12-8	1,2-Dibromo-3-chloropropane	20	13.6	68	13.8	69	1	67-131/30
541-73-1	m-Dichlorobenzene	20	19.4	97	19.8	99	2	84-121/30
95-50-1	o-Dichlorobenzene	20	19.6	98	20.2	101	3	83-120/30
106-46-7	p-Dichlorobenzene	20	18.9	95	18.7	94	1	83-122/30
75-34-3	1,1-Dichloroethane	20	17.7	89	18.6	93	5	78-124/30
107-06-2	1,2-Dichloroethane	20	18.5	93	19.1	96	3	74-127/30
75-35-4	1,1-Dichloroethylene	20	17.0	85	17.7	89	4	70-134/30
156-59-2	cis-1,2-Dichloroethylene	20	19.0	95	19.8	99	4	78-122/30
156-60-5	trans-1,2-Dichloroethylene	20	17.0	85	17.6	88	3	75-127/30
540-59-0	1,2-Dichloroethene (total)	40	36.1	90	37.4	94	4	78-123/30
78-87-5	1,2-Dichloropropane	20	18.9	95	19.4	97	3	82-120/30
10061-01-5	cis-1,3-Dichloropropene	20	17.4	87	17.7	89	2	79-122/30
10061-02-6	trans-1,3-Dichloropropene	20	17.2	86	17.7	89	3	78-124/30
542-75-6	1,3-Dichloropropene (total)	40	34.6	87	35.4	89	2	50-150/30 [a]
100-41-4	Ethylbenzene	20	19.6	98	20.1	101	3	84-117/30
67-72-1	Hexachloroethane	20	14.9	75	15.3	77	3	53-141/30
78-83-1	Isobutyl Alcohol	200	180	90	182	91	1	20-175/30
74-83-9	Methyl Bromide	20	19.1	96	19.4	97	2	37-198/30
74-87-3	Methyl Chloride	20	15.7	79	16.5	83	5	50-136/30
75-09-2	Methylene Chloride	20	18.7	94	19.4	97	4	71-130/30
78-93-3	Methyl Ethyl Ketone	50	48.7	97	50.2	100	3	59-149/30
108-10-1	4-Methyl-2-pentanone	50	42.0	84	43.4	87	3	74-131/30
1634-04-4	Methyl Tert Butyl Ether	20	19.5	98	19.2	96	2	70-126/30
100-42-5	Styrene	20	18.7	94	19.1	96	2	79-128/30
630-20-6	1,1,1,2-Tetrachloroethane	20	19.1	96	19.9	100	4	84-120/30
79-34-5	1,1,2,2-Tetrachloroethane	20	19.0	95	19.2	96	1	77-126/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
V1I1896-BS1	1I040647.D	1	10/29/18	LS	n/a	n/a	V1I1896
V1I1896-BSD1	1I040649.D	1	10/29/18	LS	n/a	n/a	V1I1896

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

LA49190-6, LA49190-7, LA49190-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	20	18.3	92	19.1	96	4	75-133/30
108-88-3	Toluene	20	18.4	92	19.0	95	3	80-121/30
71-55-6	1,1,1-Trichloroethane	20	18.1	91	18.8	94	4	74-126/30
79-00-5	1,1,2-Trichloroethane	20	18.9	95	19.5	98	3	80-123/30
79-01-6	Trichloroethylene	20	19.3	97	19.6	98	2	62-125/30
75-69-4	Trichlorofluoromethane	20	15.8	79	16.6	83	5	62-148/30
75-01-4	Vinyl Chloride	20	17.2	86	17.9	90	4	67-130/30
	m,p-Xylene	40	41.4	104	42.6	107	3	82-121/30
95-47-6	o-Xylene	20	18.2	91	18.8	94	3	84-119/30
1330-20-7	Xylene (total)	60	59.5	99	61.4	102	3	81-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	90%	91%	84-124%
2037-26-5	Toluene-D8	101%	101%	83-115%
460-00-4	4-Bromofluorobenzene	100%	101%	89-111%

(a) Advisory control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
V1Q2285-BS1	1Q0444681.D	1	10/31/18	NN	n/a	n/a	V1Q2285
V1Q2285-BSD1	1Q0444683.D	1	10/31/18	NN	n/a	n/a	V1Q2285

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

LA49190-9, LA49190-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	64.5	129	71.2	142	10	38-178/30
71-43-2	Benzene	20	18.2	91	20.5	103	12	82-119/30
75-27-4	Bromodichloromethane	20	18.5	93	21.6	108	15	79-120/30
75-25-2	Bromoform	20	18.6	93	18.5	93	1	68-128/30
75-15-0	Carbon Disulfide	20	18.1	91	20.6	103	13	64-133/30
56-23-5	Carbon Tetrachloride	20	18.3	92	19.7	99	7	69-132/30
108-90-7	Chlorobenzene	20	17.7	89	19.7	99	11	85-120/30
75-00-3	Chloroethane	20	20.5	103	23.4	117	13	33-170/30
67-66-3	Chloroform	20	18.9	95	20.1	101	6	80-122/30
124-48-1	Dibromochloromethane	20	17.3	87	19.6	98	12	73-125/30
96-12-8	1,2-Dibromo-3-chloropropane	20	17.3	87	19.9	100	14	67-131/30
541-73-1	m-Dichlorobenzene	20	18.0	90	20.2	101	12	84-121/30
95-50-1	o-Dichlorobenzene	20	17.9	90	20.0	100	11	83-120/30
106-46-7	p-Dichlorobenzene	20	18.1	91	20.9	105	14	83-122/30
75-34-3	1,1-Dichloroethane	20	18.6	93	20.0	100	7	78-124/30
107-06-2	1,2-Dichloroethane	20	18.2	91	20.2	101	10	74-127/30
75-35-4	1,1-Dichloroethylene	20	17.7	89	20.9	105	17	70-134/30
156-59-2	cis-1,2-Dichloroethylene	20	16.6	83	17.8	89	7	78-122/30
156-60-5	trans-1,2-Dichloroethylene	20	18.3	92	19.9	100	8	75-127/30
540-59-0	1,2-Dichloroethene (total)	40	34.9	87	37.7	94	8	78-123/30
78-87-5	1,2-Dichloropropane	20	19.0	95	19.8	99	4	82-120/30
10061-01-5	cis-1,3-Dichloropropene	20	18.3	92	20.5	103	11	79-122/30
10061-02-6	trans-1,3-Dichloropropene	20	19.2	96	21.2	106	10	78-124/30
542-75-6	1,3-Dichloropropene (total)	40	37.5	94	41.7	104	11	50-150/30 [a]
100-41-4	Ethylbenzene	20	18.6	93	21.0	105	12	84-117/30
67-72-1	Hexachloroethane	20	17.5	88	17.7	89	1	53-141/30
78-83-1	Isobutyl Alcohol	200	173	87	217	109	23	20-175/30
74-83-9	Methyl Bromide	20	24.6	123	25.8	129	5	37-198/30
74-87-3	Methyl Chloride	20	19.8	99	21.5	108	8	50-136/30
75-09-2	Methylene Chloride	20	17.0	85	18.8	94	10	71-130/30
78-93-3	Methyl Ethyl Ketone	50	49.6	99	56.1	112	12	59-149/30
108-10-1	4-Methyl-2-pentanone	50	51.6	103	54.4	109	5	74-131/30
1634-04-4	Methyl Tert Butyl Ether	20	17.4	87	19.2	96	10	70-126/30
100-42-5	Styrene	20	19.2	96	21.6	108	12	79-128/30
630-20-6	1,1,1,2-Tetrachloroethane	20	20.1	101	20.9	105	4	84-120/30
79-34-5	1,1,2,2-Tetrachloroethane	20	16.5	83	18.7	94	13	77-126/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
V1Q2285-BS1	1Q0444681.D	1	10/31/18	NN	n/a	n/a	V1Q2285
V1Q2285-BSD1	1Q0444683.D	1	10/31/18	NN	n/a	n/a	V1Q2285

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

LA49190-9, LA49190-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	20	20.1	101	22.9	115	13	75-133/30
108-88-3	Toluene	20	19.5	98	21.2	106	8	80-121/30
71-55-6	1,1,1-Trichloroethane	20	19.2	96	21.4	107	11	74-126/30
79-00-5	1,1,2-Trichloroethane	20	18.7	94	20.8	104	11	80-123/30
79-01-6	Trichloroethylene	20	20.3	102	23.1	116	13	62-125/30
75-69-4	Trichlorofluoromethane	20	20.6	103	22.4	112	8	62-148/30
75-01-4	Vinyl Chloride	20	19.3	97	21.3	107	10	67-130/30
	m,p-Xylene	40	40.9	102	44.7	112	9	82-121/30
95-47-6	o-Xylene	20	19.3	97	21.6	108	11	84-119/30
1330-20-7	Xylene (total)	60	60.2	100	66.3	111	10	81-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	96%	95%	84-124%
2037-26-5	Toluene-D8	98%	99%	83-115%
460-00-4	4-Bromofluorobenzene	101%	105%	89-111%

(a) Advisory control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA49190
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
LA49176-5MS	1I040713.D	5	10/31/18	LS	n/a	n/a	V1I1896
LA49176-5MSD	1I040715.D	5	10/31/18	LS	n/a	n/a	V1I1896
LA49176-5	1I040659.D	1	10/29/18	LS	n/a	n/a	V1I1896

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

LA49190-6, LA49190-7, LA49190-8

CAS No.	Compound	LA49176-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	172	69	250	179	72	4	39-164/27
71-43-2	Benzene	ND		100	99.6	100	100	104	104	4	31-161/15
75-27-4	Bromodichloromethane	ND		100	102	102	100	105	105	3	64-122/36
75-25-2	Bromoform	ND		100	78.0	78	100	82.3	82	5	43-125/37
75-15-0	Carbon Disulfide	ND		100	98.9	99	100	103	103	4	38-138/36
56-23-5	Carbon Tetrachloride	ND		100	97.8	98	100	102	102	4	53-133/36
108-90-7	Chlorobenzene	ND		100	97.2	97	100	98.8	99	2	74-122/34
75-00-3	Chloroethane	ND		100	118	118	100	119	119	1	14-181/43
67-66-3	Chloroform	ND		100	97.9	98	100	101	101	3	65-130/24
124-48-1	Dibromochloromethane	ND		100	88.1	88	100	93.1	93	6	57-121/36
96-12-8	1,2-Dibromo-3-chloropropane	ND		100	63.2	63	100	71.1	71	12	46-135/25
541-73-1	m-Dichlorobenzene	ND		100	101	101	100	102	102	1	70-120/35
95-50-1	o-Dichlorobenzene	ND		100	98.6	99	100	102	102	3	72-120/35
106-46-7	p-Dichlorobenzene	ND		100	95.3	95	100	97.8	98	3	68-120/35
75-34-3	1,1-Dichloroethane	ND		100	98.0	98	100	101	101	3	56-138/32
107-06-2	1,2-Dichloroethane	ND		100	108	108	100	111	111	3	51-141/39
75-35-4	1,1-Dichloroethylene	ND		100	92.9	93	100	95.6	96	3	48-139/37
156-59-2	cis-1,2-Dichloroethylene	ND		100	98.1	98	100	101	101	3	56-133/15
156-60-5	trans-1,2-Dichloroethylene	ND		100	95.5	96	100	96.1	96	1	59-128/37
540-59-0	1,2-Dichloroethene (total)	ND		200	194	97	200	197	99	2	54-134/30
78-87-5	1,2-Dichloropropane	ND		100	98.6	99	100	101	101	2	68-124/32
10061-01-5	cis-1,3-Dichloropropene	ND		100	84.2	84	100	87.1	87	3	62-120/35
10061-02-6	trans-1,3-Dichloropropene	ND		100	90.8	91	100	94.6	95	4	64-119/36
542-75-6	1,3-Dichloropropene (total)	ND		200	175	88	200	182	91	4	50-150/30 [a]
100-41-4	Ethylbenzene	ND		100	105	105	100	107	107	2	47-146/30
67-72-1	Hexachloroethane	ND		100	69.1	69	100	71.5	72	3	32-128/39
78-83-1	Isobutyl Alcohol	ND		1000	855	86	1000	885	89	3	33-142/54
74-83-9	Methyl Bromide	ND		100	104	104	100	107	107	3	1-150/64
74-87-3	Methyl Chloride	ND		100	90.4	90	100	93.4	93	3	16-146/29
75-09-2	Methylene Chloride	ND		100	115	115	100	116	116	1	55-134/36
78-93-3	Methyl Ethyl Ketone	ND		250	230	92	250	235	94	2	54-142/39
108-10-1	4-Methyl-2-pentanone	ND		250	233	93	250	236	94	1	60-140/40
1634-04-4	Methyl Tert Butyl Ether	ND		100	99.0	99	100	99.6	100	1	52-146/32
100-42-5	Styrene	ND		100	96.3	96	100	98.8	99	3	67-128/35
630-20-6	1,1,1,2-Tetrachloroethane	ND		100	104	104	100	106	106	2	67-121/35
79-34-5	1,1,2,2-Tetrachloroethane	ND		100	104	104	100	103	103	1	64-133/38

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA49190
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
LA49176-5MS	1I040713.D	5	10/31/18	LS	n/a	n/a	V1I1896
LA49176-5MSD	1I040715.D	5	10/31/18	LS	n/a	n/a	V1I1896
LA49176-5	1I040659.D	1	10/29/18	LS	n/a	n/a	V1I1896

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

LA49190-6, LA49190-7, LA49190-8

CAS No.	Compound	LA49176-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	ND		100	97.4	97	100	101	101	4	58-135/37
108-88-3	Toluene	ND		100	97.0	97	100	99.3	99	2	36-155/17
71-55-6	1,1,1-Trichloroethane	ND		100	101	101	100	103	103	2	63-128/36
79-00-5	1,1,2-Trichloroethane	ND		100	102	102	100	102	102	0	61-138/17
79-01-6	Trichloroethylene	ND		100	98.9	99	100	103	103	4	57-131/36
75-69-4	Trichlorofluoromethane	ND		100	103	103	100	105	105	2	31-156/36
75-01-4	Vinyl Chloride	ND		100	95.7	96	100	97.6	98	2	22-155/49
	m,p-Xylene	ND		200	224	112	200	230	115	3	35-159/31
95-47-6	o-Xylene	ND		100	93.3	93	100	96.6	97	3	50-144/35
1330-20-7	Xylene (total)	ND		300	318	106	300	327	109	3	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA49176-5	Limits
17060-07-0	1,2-Dichloroethane-D4	100%	100%	110%	84-124%
2037-26-5	Toluene-D8	98%	99%	99%	83-115%
460-00-4	4-Bromofluorobenzene	102%	102%	94%	89-111%

(a) Advisory control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA49190
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
LA49175-1MS	1Q0444727.D	2	10/31/18	NN	n/a	n/a	V1Q2285
LA49175-1MSD	1Q0444729.D	2	10/31/18	NN	n/a	n/a	V1Q2285
LA49175-1	1Q0444707.D	1	10/31/18	NN	n/a	n/a	V1Q2285

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

LA49190-9, LA49190-10

CAS No.	Compound	LA49175-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		100	83.3	83	100	67.3	67	21	39-164/27
71-43-2	Benzene	ND		40	39.4	99	40	35.7	89	10	31-161/15
75-27-4	Bromodichloromethane	ND		40	37.8	95	40	36.7	92	3	64-122/36
75-25-2	Bromoform	ND		40	34.1	85	40	32.1	80	6	43-125/37
75-15-0	Carbon Disulfide	ND		40	38.3	96	40	37.9	95	1	38-138/36
56-23-5	Carbon Tetrachloride	ND		40	35.5	89	40	36.1	90	2	53-133/36
108-90-7	Chlorobenzene	ND		40	35.4	89	40	34.4	86	3	74-122/34
75-00-3	Chloroethane	ND		40	40.4	101	40	39.3	98	3	14-181/43
67-66-3	Chloroform	ND		40	38.6	97	40	36.8	92	5	65-130/24
124-48-1	Dibromochloromethane	ND		40	35.2	88	40	34.8	87	1	57-121/36
96-12-8	1,2-Dibromo-3-chloropropane	ND		40	35.5	89	40	35.3	88	1	46-135/25
541-73-1	m-Dichlorobenzene	ND		40	35.8	90	40	36.8	92	3	70-120/35
95-50-1	o-Dichlorobenzene	ND		40	35.9	90	40	35.0	88	3	72-120/35
106-46-7	p-Dichlorobenzene	ND		40	37.2	93	40	35.4	89	5	68-120/35
75-34-3	1,1-Dichloroethane	ND		40	37.5	94	40	35.5	89	5	56-138/32
107-06-2	1,2-Dichloroethane	ND		40	36.0	90	40	35.2	88	2	51-141/39
75-35-4	1,1-Dichloroethylene	ND		40	38.2	96	40	35.5	89	7	48-139/37
156-59-2	cis-1,2-Dichloroethylene	ND		40	34.1	85	40	31.8	80	7	56-133/15
156-60-5	trans-1,2-Dichloroethylene	ND		40	35.3	88	40	33.1	83	6	59-128/37
540-59-0	1,2-Dichloroethene (total)	ND		80	69.4	87	80	64.9	81	7	54-134/30
78-87-5	1,2-Dichloropropane	ND		40	39.4	99	40	37.0	93	6	68-124/32
10061-01-5	cis-1,3-Dichloropropene	ND		40	37.8	95	40	32.8	82	14	62-120/35
10061-02-6	trans-1,3-Dichloropropene	ND		40	40.4	101	40	35.7	89	12	64-119/36
542-75-6	1,3-Dichloropropene (total)	ND		80	78.1	98	80	68.5	86	13	50-150/30 [a]
100-41-4	Ethylbenzene	ND		40	38.5	96	40	36.4	91	6	47-146/30
67-72-1	Hexachloroethane	ND		40	29.1	73	40	29.6	74	2	32-128/39
78-83-1	Isobutyl Alcohol	ND		400	450	113	400	344	86	27	33-142/54
74-83-9	Methyl Bromide	ND		40	37.7	94	40	35.5	89	6	1-150/64
74-87-3	Methyl Chloride	ND		40	38.4	96	40	37.3	93	3	16-146/29
75-09-2	Methylene Chloride	ND		40	33.8	85	40	32.1	80	5	55-134/36
78-93-3	Methyl Ethyl Ketone	ND		100	99.5	100	100	84.5	85	16	54-142/39
108-10-1	4-Methyl-2-pentanone	ND		100	114	114	100	96.7	97	16	60-140/40
1634-04-4	Methyl Tert Butyl Ether	ND		40	37.2	93	40	35.6	89	4	52-146/32
100-42-5	Styrene	0.27		40	38.7	96	40	36.0	89	7	67-128/35
630-20-6	1,1,1,2-Tetrachloroethane	ND		40	37.6	94	40	35.9	90	5	67-121/35
79-34-5	1,1,2,2-Tetrachloroethane	ND		40	36.5	91	40	31.7	79	14	64-133/38

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA49190
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
LA49175-1MS	1Q0444727.D	2	10/31/18	NN	n/a	n/a	V1Q2285
LA49175-1MSD	1Q0444729.D	2	10/31/18	NN	n/a	n/a	V1Q2285
LA49175-1	1Q0444707.D	1	10/31/18	NN	n/a	n/a	V1Q2285

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

LA49190-9, LA49190-10

CAS No.	Compound	LA49175-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	ND		40	41.6	104	40	39.4	99	5	58-135/37
108-88-3	Toluene	ND		40	39.2	98	40	37.2	93	5	36-155/17
71-55-6	1,1,1-Trichloroethane	ND		40	38.0	95	40	37.3	93	2	63-128/36
79-00-5	1,1,2-Trichloroethane	ND		40	40.3	101	40	36.9	92	9	61-138/17
79-01-6	Trichloroethylene	ND		40	42.1	105	40	39.0	98	8	57-131/36
75-69-4	Trichlorofluoromethane	ND		40	39.9	100	40	39.6	99	1	31-156/36
75-01-4	Vinyl Chloride	ND		40	37.8	95	40	36.6	92	3	22-155/49
	m,p-Xylene	ND		80	83.5	104	80	79.4	99	5	35-159/31
95-47-6	o-Xylene	ND		40	40.3	101	40	38.4	96	5	50-144/35
1330-20-7	Xylene (total)	ND		120	124	103	120	118	98	5	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA49175-1	Limits
17060-07-0	1,2-Dichloroethane-D4	97%	99%	96%	84-124%
2037-26-5	Toluene-D8	99%	97%	98%	83-115%
460-00-4	4-Bromofluorobenzene	103%	103%	100%	89-111%

(a) Advisory control limits.

* = Outside of Control Limits.

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: LA49190
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
OP12646-MB	L0022583.D	1	10/30/18	JS	10/29/18	OP12646	EL593

The QC reported here applies to the following samples: **Method:** SW846 8270D

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

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	0.049	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	ND	5.0	ug/l	
206-44-0	Fluoranthene	ND	0.20	ug/l	

Method Blank Summary

Job Number: LA49190
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
OP12646-MB	L0022583.D	1	10/30/18	JS	10/29/18	OP12646	EL593

The QC reported here applies to the following samples: **Method:** SW846 8270D

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

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	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	55%	23-85%
4165-62-2	Phenol-d5	44%	10-69%
118-79-6	2,4,6-Tribromophenol	83%	48-138%
4165-60-0	Nitrobenzene-d5	72%	51-128%
321-60-8	2-Fluorobiphenyl	76%	55-122%
1718-51-0	Terphenyl-d14	84%	43-138%

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
OP12646-BS	L0022584.D	1	10/30/18	JS	10/29/18	OP12646	EL593
OP12646-BSD	L0022585.D	1	10/30/18	JS	10/29/18	OP12646	EL593

The QC reported here applies to the following samples: **Method:** SW846 8270D

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	5	4.0	80	4.1	82	2	63-104/19
120-83-2	2,4-Dichlorophenol	5	4.3	86	4.2	84	2	68-112/19
105-67-9	2,4-Dimethylphenol	5	4.0	80	4.1	82	2	64-110/20
51-28-5	2,4-Dinitrophenol	25	18.3	73	18.5	74	1	51-121/30
100-02-7	4-Nitrophenol	25	11.1	44	11.5	46	4	20-68/23
87-86-5	Pentachlorophenol	25	19.5	78	19.6	78	1	52-120/29
108-95-2	Phenol	5	2.5	50	2.6	52	4	18-67/20
58-90-2	2,3,4,6-Tetrachlorophenol	5	4.4	88	4.6	92	4	67-121/21
95-95-4	2,4,5-Trichlorophenol	5	4.4	88	4.5	90	2	67-119/21
88-06-2	2,4,6-Trichlorophenol	5	4.4	88	4.4	88	0	67-120/21
83-32-9	Acenaphthene	5	3.8	76	3.8	76	0	67-114/28
208-96-8	Acenaphthylene	5	3.9	78	3.9	78	0	67-119/26
62-53-3	Aniline	5	2.8	56	2.4	48	15	40-114/40
120-12-7	Anthracene	5	4.0	80	3.9	78	3	68-121/24
56-55-3	Benzo(a)anthracene	5	4.0	80	4.0	80	0	69-113/20
50-32-8	Benzo(a)pyrene	5	4.0	80	4.1	82	2	71-124/22
205-99-2	Benzo(b)fluoranthene	5	4.0	80	4.1	82	2	72-120/22
207-08-9	Benzo(k)fluoranthene	5	4.4	88	4.4	88	0	71-124/21
92-52-4	1,1'-Biphenyl	5	3.8	76	3.7	74	3	65-122/29
85-68-7	Butyl Benzyl Phthalate	5	4.6	92	4.7	94	2	73-123/21
106-47-8	4-Chloroaniline	5	3.6	72	3.6	72	0	58-113/51
111-44-4	bis(2-Chloroethyl)ether	5	3.7	74	3.8	76	3	50-118/28
108-60-1	2,2'-Oxybis(1-chloropropane)	5	3.7	74	3.7	74	0	43-138/21
91-58-7	2-Chloronaphthalene	5	3.7	74	3.6	72	3	64-114/30
218-01-9	Chrysene	5	4.0	80	4.0	80	0	70-115/20
53-70-3	Dibenzo(a,h)anthracene	5	4.2	84	4.2	84	0	70-124/21
132-64-9	Dibenzofuran	5	3.8	76	3.8	76	0	67-117/27
91-94-1	3,3'-Dichlorobenzidine	5	4.0	80	3.5	70	13	69-122/38
84-66-2	Diethyl Phthalate	5	4.0	80	4.0	80	0	71-123/21
131-11-3	Dimethyl Phthalate	5	4.0	80	4.1	82	2	69-119/20
117-84-0	Di-n-octyl Phthalate	5	4.5	90	4.8	96	6	66-121/22
99-65-0	1,3-Dinitrobenzene	25	22.1	88	22.3	89	1	71-122/21
121-14-2	2,4-Dinitrotoluene	5	4.4	88	4.5	90	2	73-122/21
606-20-2	2,6-Dinitrotoluene	5	4.1	82	4.1	82	0	72-121/21
117-81-7	bis(2-Ethylhexyl)phthalate	5	4.5	90	4.7	94	4	68-126/21
206-44-0	Fluoranthene	5	4.2	84	4.1	82	2	73-120/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
OP12646-BS	L0022584.D	1	10/30/18	JS	10/29/18	OP12646	EL593
OP12646-BSD	L0022585.D	1	10/30/18	JS	10/29/18	OP12646	EL593

The QC reported here applies to the following samples: **Method:** SW846 8270D

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
86-73-7	Fluorene	5	4.0	80	3.9	78	3	69-118/25
118-74-1	Hexachlorobenzene	5	4.1	82	4.1	82	0	67-117/23
87-68-3	Hexachlorobutadiene	5	2.9	58	2.8	56	4	42-120/35
77-47-4	Hexachlorocyclopentadiene	5	2.9	58	2.8	56	4	35-123/48
193-39-5	Indeno(1,2,3-cd)pyrene	5	4.3	86	4.3	86	0	70-123/21
78-59-1	Isophorone	5	4.3	86	4.3	86	0	70-119/19
91-57-6	2-Methylnaphthalene	5	3.8	76	3.7	74	3	65-113/27
91-20-3	Naphthalene	5	3.6	72	3.5	70	3	63-114/23
88-74-4	2-Nitroaniline	25	21.7	87	21.9	88	1	68-125/21
99-09-2	3-Nitroaniline	25	19.4	78	19.7	79	2	69-117/23
100-01-6	4-Nitroaniline	25	19.8	79	19.5	78	2	67-122/19
98-95-3	Nitrobenzene	5	4.0	80	3.9	78	3	69-116/21
621-64-7	N-Nitroso-di-n-propylamine	5	4.2	84	4.3	86	2	67-120/20
86-30-6	N-Nitrosodiphenylamine	5	4.0	80	3.8	76	5	67-119/25
85-01-8	Phenanthrene	5	3.9	78	3.8	76	3	70-117/23
129-00-0	Pyrene	5	4.2	84	4.3	86	2	70-119/21
95-94-3	1,2,4,5-Tetrachlorobenzene	5	3.5	70	3.4	68	3	55-117/35
120-82-1	1,2,4-Trichlorobenzene	5	3.4	68	3.4	68	0	56-111/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	60%	61%	23-85%
4165-62-2	Phenol-d5	49%	51%	10-69%
118-79-6	2,4,6-Tribromophenol	92%	91%	48-138%
4165-60-0	Nitrobenzene-d5	76%	75%	51-128%
321-60-8	2-Fluorobiphenyl	78%	78%	55-122%
1718-51-0	Terphenyl-d14	86%	86%	43-138%

* = Outside of Control Limits.

GC Volatiles

6

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: LA49190
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
GLC1884-MB1	LC381222.D	1	10/29/18	MB	n/a	n/a	GLC1884

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

LA49190-6, LA49190-7, LA49190-8, LA49190-9, LA49190-10

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	106% [a]	70-130%
615-59-8	2,5-Dibromotoluene	100% [b]	70-130%

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

Method Blank Summary

Job Number: LA49190
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
GLC1885-MB1	LC381247.D	1	10/30/18	MB	n/a	n/a	GLC1885

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

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

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	107% [a]	70-130%
615-59-8	2,5-Dibromotoluene	97% [b]	70-130%

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

Method Blank Summary

Job Number: LA49190
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
OP12675-MB	LK113863.D	1	10/31/18	JS	10/29/18	OP12675	GLK739

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

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

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	111%	55-149%

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
GLC1884-BS1	LC381217.D	1	10/29/18	MB	n/a	n/a	GLC1884
GLC1884-BSD1	LC381218.D	1	10/29/18	MB	n/a	n/a	GLC1884

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

LA49190-6, LA49190-7, LA49190-8, LA49190-9, LA49190-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	150	154	103	163	109	6	70-130/30
	Aliphatics > C8-C10 (Unadj.)	250	280	112	265	106	6	70-130/30
	Aromatics > C8-C10 (Unadj.)	250	256	102	254	102	1	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	112% [a]	106% [a]	70-130%
615-59-8	2,5-Dibromotoluene	104% [b]	100% [b]	70-130%

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

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
GLC1885-BS1	LC381242.D	1	10/30/18	MB	n/a	n/a	GLC1885
GLC1885-BSD1	LC381243.D	1	10/30/18	MB	n/a	n/a	GLC1885

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

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	150	146	97	162	108	10	70-130/30
	Aliphatics > C8-C10 (Unadj.)	250	275	110	261	104	5	70-130/30
	Aromatics > C8-C10 (Unadj.)	250	246	98	248	99	1	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	109% [a]	105% [a]	70-130%
615-59-8	2,5-Dibromotoluene	100% [b]	96% [b]	70-130%

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

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
OP12675-BS	LK113864.D	1	10/31/18	JS	10/29/18	OP12675	GLK739
OP12675-BSD	LK113865.D	1	10/31/18	JS	10/29/18	OP12675	GLK739

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

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

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	0.27	107	0.27	107	0	60-148/18

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
348-51-6	1-Chloro-2-fluorobenzene	109%	110%	55-149%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA49190
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
LA49177-2MS	LC381276.D	2	10/31/18	MB	n/a	n/a	GLC1885
LA49177-2MSD	LC381277.D	2	10/31/18	MB	n/a	n/a	GLC1885
LA49177-2	LC381264.D	1	10/31/18	MB	n/a	n/a	GLC1885

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

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

CAS No.	Compound	LA49177-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	62.5		300	326	88	300	327	88	0	70-130/50
	Aliphatics > C8-C10 (Unadj.)	150		500	599	90	500	620	94	3	70-130/50
	Aromatics > C8-C10 (Unadj.)	203		500	645	88	500	655	90	2	70-130/50

CAS No.	Surrogate Recoveries	MS	MSD	LA49177-2	Limits
615-59-8	2,5-Dibromotoluene	105% [a]	109% [a]	115% [a]	70-130%
615-59-8	2,5-Dibromotoluene	96% [b]	99% [b]	101% [b]	70-130%

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

* = 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: LA49190
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
OP12664-MB	X0005596.D	1	11/01/18	JT	10/30/18	OP12664	GLB1653

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

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

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		Limits
84-15-1	o-Terphenyl	68%	40-140%
321-60-8	2-Fluorobiphenyl	83%	40-140%

Method Blank Summary

Job Number: LA49190
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
OP12664-MB	Y0005596.D	1	11/01/18	JT	10/30/18	OP12664	GLB1654

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

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

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		Limits
3386-33-2	1-Chlorooctadecane	75%	40-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
OP12664-BS	X0005673.D	1	11/05/18	JT	10/30/18	OP12664	GLB1657
OP12664-BSD	X0005674.D	1	11/05/18	JT	10/30/18	OP12664	GLB1657

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

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aromatics > C10-C12 (Unadj.)	466	301	65	304	65	1	40-140/30
	Aromatics > C12-C16 (Unadj.)	1400	892	64	897	64	1	40-140/30
	Aromatics > C16-C21 (Unadj.)	2330	1620	70	1630	70	1	40-140/30
	Aromatics > C21-C35 (Unadj.)	3720	2280	61	2270	61	0	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	67%	67%	40-140%
321-60-8	2-Fluorobiphenyl	69%	69%	40-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49190
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
OP12664-BS	Y0005673.D	1	11/05/18	JT	10/30/18	OP12664	GLB1658
OP12664-BSD	Y0005674.D	1	11/05/18	JT	10/30/18	OP12664	GLB1658

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

LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics > C10-C12 (Unadj.)	466	276	59	277	60	0	40-140/30
	Aliphatics > C12-C16 (Unadj.)	931	531	57	534	57	1	40-140/30
	Aliphatics > C16-C35 (Unadj.)	4190	2240	53	2230	53	0	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
3386-33-2	1-Chlorooctadecane	55%	56%	40-140%

* = Outside of Control Limits.

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: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13159 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.06	.081	0.00070	<0.20

Associated samples MP13159: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

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: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13159 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	LA49190-2 Original	MS	Spikelot HGSPIKE1	% Rec	QC Limits
Mercury	0.0	4.4	5	88.0	75-125

Associated samples MP13159: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13159 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	LA49190-2 Original	MSD	Spikelot HGSPIKE1	% Rec	MSD RPD	QC Limit
Mercury	0.0	4.4	5	88.0	0.0	20

Associated samples MP13159: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13159 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	BSP Result	Spikelot HGSPIKE1 % Rec	QC Limits
Mercury	4.6	5 92.0	80-120

Associated samples MP13159: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13159 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	LA49190-2 Original	SDL 1:5	%DIF	QC Limits
Mercury	0.00	0.00	NC	0-

Associated samples MP13159: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	100	6.9	9.3	-0.54	<100
Antimony	1.0	.043	.34		
Arsenic	1.0	.062	.26	0.091	<1.0
Barium	1.0	.033	.46	0.038	<1.0
Beryllium	1.0	.0077	.28		
Boron	20	1.3	2.9		
Cadmium	0.50	.011	.12	0.10	<0.50
Calcium	100	5.7	20	0.35	<100
Cerium	1.0	.0041	.16		
Chromium	1.0	.11	.15	-0.041	<1.0
Cobalt	1.0	.012	.14		
Copper	1.0	.91	.74		
Iron	100	48	16	-10	<100
Lanthanum	1.0	.0038	.41		
Lithium	2.0	.1	.61		
Lead	1.0	.0081	.13	-0.087	<1.0
Magnesium	100	1.6	11	3.7	<100
Manganese	2.0	.48	.53	-0.033	<2.0
Molybdenum	1.0	.048	.89		
Nickel	1.0	.037	.2		
Potassium	100	3.4	7.6	-28	<100
Selenium	5.0	.38	3.1	0.26	<5.0
Silver	1.0	.0047	.13	-0.0052	<1.0
Silicon	500	6.6	130		
Sodium	100	24	9.9	2.7	<100
Strontium	2.0	.12	.27	0.025	<2.0
Thallium	1.0	.021	.86		
Tin	2.0	.034	.19		
Titanium	1.0	.15	.77		
Uranium	1.0	.0048	.17		
Vanadium	1.0	.027	.1		
Zinc	5.0	1.5	1.1	-0.18	<5.0

Associated samples MP13172: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	RL	IDL	MDL	MB raw	final

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: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/29/18

Metal	TD29412-1 Original	MS	Spikelot MPICPMS6	% Rec	QC Limits
Aluminum	30.4	4740	5100	92.3	75-125
Antimony					
Arsenic	14.6	115	100	100.4	75-125
Barium	38.0	138	100	100.0	75-125
Beryllium					
Boron					
Cadmium	0.12	88.3	100	88.2	75-125
Calcium	716000	703000	5000	-260.0(a	75-125
Cerium					
Chromium	1.8	93.6	100	91.8	75-125
Cobalt					
Copper					
Iron	2320	6520	5000	84.0	75-125
Lanthanum					
Lithium					
Lead	0.27	89.9	100	89.6	75-125
Magnesium	509000	484000	5000	-500.0(a	75-125
Manganese	4070	3860	100	-210.0(a	75-125
Molybdenum					
Nickel					
Potassium	11300	16000	5000	94.0	75-125
Selenium	0.95	493	500	98.4	75-125
Silver	0.0	67.4	100	67.4N(b)	75-125
Silicon					
Sodium	1380000	1290000	5000	-1800.0a	75-125
Strontium	7820	7360	100	-460.0(a	75-125
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	4.9	87.9	100	83.0	75-125

Associated samples MP13172: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

	TD29412-1	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 amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	TD29412-1 Original	MSD	Spikelot MPICPMS6	% Rec	MSD RPD	QC Limit
Aluminum	30.4	4840	5100	94.3	2.1	20
Antimony						
Arsenic	14.6	113	100	98.4	1.8	20
Barium	38.0	143	100	105.0	3.6	20
Beryllium						
Boron						
Cadmium	0.12	89.1	100	89.0	0.9	20
Calcium	716000	686000	5000	-600.0(a	2.4	20
Cerium						
Chromium	1.8	93.6	100	91.8	0.0	20
Cobalt						
Copper						
Iron	2320	6600	5000	85.6	1.2	20
Lanthanum						
Lithium						
Lead	0.27	93.0	100	92.7	3.4	20
Magnesium	509000	481000	5000	-560.0(a	0.6	20
Manganese	4070	3870	100	-200.0(a	0.3	20
Molybdenum						
Nickel						
Potassium	11300	15800	5000	90.0	1.3	20
Selenium	0.95	497	500	99.2	0.8	20
Silver	0.0	67.8	100	67.8N(b)	0.6	20
Silicon						
Sodium	1380000	1290000	5000	-1800.0a	0.0	20
Strontium	7820	7400	100	-420.0(a	0.5	20
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	4.9	87.9	100	83.0	0.0	20

Associated samples MP13172: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

	TD29412-1	Spikelot	MSD	QC
Metal	Original MSD	MPICPMS6 % Rec	RPD	Limit

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 amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	BSP Result	Spikelot MPICPMS6	% Rec	QC Limits
Aluminum	5420	5100	106.3	80-120
Antimony				
Arsenic	109	100	109.0	80-120
Barium	109	100	109.0	80-120
Beryllium				
Boron				
Cadmium	106	100	106.0	80-120
Calcium	5590	5000	111.8	80-120
Cerium				
Chromium	107	100	107.0	80-120
Cobalt				
Copper				
Iron	5380	5000	107.6	80-120
Lanthanum				
Lithium				
Lead	112	100	112.0	80-120
Magnesium	5240	5000	104.8	80-120
Manganese	107	100	107.0	80-120
Molybdenum				
Nickel				
Potassium	5550	5000	111.0	80-120
Selenium	521	500	104.2	80-120
Silver	100	100	100.0	80-120
Silicon				
Sodium	5280	5000	105.6	80-120
Strontium	106	100	106.0	80-120
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	108	100	108.0	80-120

Associated samples MP13172: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	BSP Result	Spikelot MPICPMS6 % Rec	QC Limits

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	TD29412-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	30.4	0.00	100.0(a)	0-10
Antimony				
Arsenic	14.6	17.1	17.2*(b)	0-10
Barium	38.0	45.2	19.0*(b)	0-10
Beryllium				
Boron				
Cadmium	0.124	0.501	303.7(a)	0-10
Calcium	716000	868000	21.1*(b)	0-10
Cerium				
Chromium	1.75	2.07	18.1 (a)	0-10
Cobalt				
Copper				
Iron	2320	2560	10.5 (a)	0-10
Lanthanum				
Lithium				
Lead	0.267	0.00	100.0(a)	0-10
Magnesium	509000	487000	4.4	0-10
Manganese	4070	3900	4.3	0-10
Molybdenum				
Nickel				
Potassium	11300	13600	21.1*(b)	0-10
Selenium	0.952	0.00	100.0(a)	0-10
Silver	0.00	0.00	NC	0-10
Silicon				
Sodium	1380000	1330000	3.5	0-10
Strontium	7820	7410	5.3	0-10
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	4.92	0.00	100.0(a)	0-10

Associated samples MP13172: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

SERIAL DILUTION RESULTS SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

	TD29412-1		QC
Metal	Original SDL 1:5	%DIF	Limits

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.

POST DIGESTATE SPIKE SUMMARY

Login Number: LA49190
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 Indigo-Desoto Parish, LA

QC Batch ID: MP13172 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/29/18

Metal	Sample ml	Final ml	TD29412-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Antimony										
Beryllium										
Boron										
Cerium										
Cobalt										
Copper										
Lanthanum										
Lithium										
Molybdenum										
Nickel										
Silver	2	10			118.1	0.1	10	100	118.1	75-125
Silicon										
Thallium										
Tin										
Titanium										
Uranium										
Vanadium										

Associated samples MP13172: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5, LA49190-1F, LA49190-2F, LA49190-3F, LA49190-4F, LA49190-5F

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

Misc. Forms

Custody Documents and Other Forms

(SGS Houston, TX)

Includes the following where applicable:

- Chain of Custody

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Page 1 of 1

CHAIN OF CUSTODY

SGS

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

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: LA49190

Client / Reporting Information

Company Name: SGS North America Inc.
Street Address: 500 Ambassador Caffery Parkway
City: Scott State: LA Zip: 70583
Project Contact: ralph.frye@sgs.com E-mail:
Phone #: 800-304-5227 Fax #:
Sampler(s) Name(s): LV/EM Phone:

Project Information

Project Name: 8060.00 (RL) Indigo-Desoto Parish, LA
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (If different from Report to)
Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	BRO/C9056_CHLIC9056_SCON_SIL_SO4IC9056_TDS, XCARBICALK,
1	UNREGESTERED (P. DAVIS WATR W		10/24/18	4:20:00 PM	LV/EM	AQ										X
2	031-9435Z (MCCLARY-260 WATER W		10/24/18	4:45:00 PM	LV/EM	AQ										X
3	031-9253Z (XTO-BAGKET26G-1 WATE		10/25/18	12:30:00 PM	LV/EM	AQ										X
4	031-9312Z (NILEN WATER WELL)		10/25/18	3:45:00 PM	LV/EM	AQ										X
5	UNREGISTGERED (K. SALLEY WATE		10/26/18	8:30:00 AM	LV/EM	AQ										X

Matrix Codes: 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

LAB USE ONLY

FLAGGED BY:

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 11/5/2018

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] REDT1 (Level 3+4)
- [ ] Commercial "C"
- [ ] TRRP
- [ ] EDD Format
- [ ] Other
- [X] COMMB

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

(5) SWM(NP)

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		10/29/18			1700	
2					0241	
3	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
			10-29-18	10-29-18	2355	10/29/18
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not intact	Preserved where applicable / On Ice / Cooler Temp
						3.0

9.1

9

LA49190: Chain of Custody
Page 1 of 4
SGS Houston, TX

Cooler 2

Date / Time: 10/27/2018 1:36:50 PM
CSR: RALPHF
Job #: LA49190
Client Project: 8060.00 (RL) Indigo-Desoto Parish, LA
Deliverable: COMMB
TAT: Due 11/5/2018

Sub Lab: SGS North America Inc. - TX
Address: 10165 Harwin Drive
City: Houston
State: TX Zip: 77036
Contact: Sample Management
Phone: (713) 692-9151

SGS Sample #	Client Sample Description	Analysis	Location	Sampled By	Date Sampled	Time Sampled	Aliquot
LA49190-1	UNREGESTERED (P. DAVIS WATR WELL)	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK,	3W2 ,3W2F ,BMM-14 VW ,OL ,YML9 1 B3 ,YSL-10 11 A-5 ,	LV/EM	10/24/2018	4:20:00 PM	/
LA49190-2	031-9435Z (MCCLARY-260 WATER WELL	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK,	3W2 ,3W2F ,BMM-14 VW ,OL ,YML9 1 B3 ,YSL-10 11 A-5 ,	LV/EM	10/24/2018	4:45:00 PM	/
LA49190-3	031-9253Z (XTO-BAGKET26G-1 WATER WELL)	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK,	3W2 ,3W2F ,BMM-14 VW ,OL ,YML9 1 B3 ,YSL-10 11 A-5 ,	LV/EM	10/25/2018	12:30:00 PM	/
LA49190-4	031-9312Z (NILEN WATER WELL)	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK,	1 A-2 ,3W2 ,3W2F ,BMM-14 VW ,OL ,YSL-10 11 A-5 ,	LV/EM	10/25/2018	3:45:00 PM	/
LA49190-5	UNREGISTGERED (K. SALLEY WATER WELL)	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK,	3W2 ,3W2F ,BMM-14 VW ,OL ,YML9 1 B3 ,YSL-10 11 A-5 ,	LV/EM	10/26/2018	8:30:00 AM	/

Comments:

Sample Management Receipt: [signature] Date: 10/29/18 2355

(5) [illegible] (ND) [initials] 10-29-18

LA49190: Chain of Custody
Page 2 of 4

SGS Sample Receipt Summary

Job Number: LA49190 **Client:** SGS **Project:** 8060.00 RL INDIGO DESOTO

Date / Time Received: **Delivery Method:** **Airbill #'s:**

No. Coolers: 1 **Therm ID:** IR9; **Temp Adjustment Factor:** 0;

Cooler Temps (Initial/Adjusted): #1: (3/3);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		

Quality Control Preservation	Y	or	N	N/A	WTB	STB
1. Trip Blank present / cooler:	☐		☐	☑	☐	☐
2. Trip Blank listed on COC:	☐		☐	☑		
3. Samples preserved properly:	☑		☐			
4. VOCs headspace free:	☐		☐	☑		

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Sample Receipt Log

Job #: LA49190 **Date / Time Received:** 10/29/2018 11:55:00 PM **Initials:** DS

Client: SGS

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	LA49190-1	500ml	1	M1A	N/P	Note #2 - Preservative check not applicable.	IR9	3	0	3
1	LA49190-2	500ml	1	M1A	N/P	Note #2 - Preservative check not applicable.	IR9	3	0	3
1	LA49190-3	500ml	1	M1A	N/P	Note #2 - Preservative check not applicable.	IR9	3	0	3
1	LA49190-4	500ml	1	M1A	N/P	Note #2 - Preservative check not applicable.	IR9	3	0	3
1	LA49190-5	500ml	1	M1A	N/P	Note #2 - Preservative check not applicable.	IR9	3	0	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: LA49190
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	GN94058	5.0	2.0	mg/l				
Alkalinity, Carbonate	GN94059	5.0	0.0	mg/l				
Alkalinity, Total as CaCO3	GN94057	5.0	0.0	mg/l	100	104	104.0	90-100%
Bromide	GP50334/GN94140	0.50	0.0	mg/l	10	10.6	106.0	90-110%
Bromide	GP50364/GN94208	0.50	0.0	mg/l	10	10.3	103.0	90-110%
Chloride	GP50334/GN94140	0.50	0.0	mg/l	10	10.3	103.0	90-110%
Chloride	GP50364/GN94208	0.50	0.0	mg/l	10	10.0	100.0	90-110%
Fluoride	GP50334/GN94140	0.50	0.0	mg/l	10	10.8	108.0	90-110%
Fluoride	GP50364/GN94208	0.50	0.0	mg/l	10	10.5	105.0	90-110%
Nitrogen, Nitrate	GP50334/GN94140	0.50	0.0	mg/l	10	10.2	102.0	90-110%
Nitrogen, Nitrate	GP50364/GN94208	0.50	0.0	mg/l	10	9.93	99.3	90-110%
Nitrogen, Nitrite	GP50334/GN94140	0.50	0.0	mg/l	10	10.6	106.0	90-110%
Nitrogen, Nitrite	GP50364/GN94208	0.50	0.0	mg/l	10	10.4	104.0	90-110%
Silica, Dissolved	GN93969	0.070	0.0	mg/l	1.07	0.97	90.7	80-120%
Solids, Total Dissolved	GN93966	10	0.0	mg/l	500	496	99.2	88-110%
Specific Conductivity	GN94052	1.0	<1.0	umhos/cm				
Sulfate	GP50334/GN94140	0.50	0.0	mg/l	10	10.5	105.0	90-110%
Sulfate	GP50364/GN94208	0.50	0.0	mg/l	10	10.3	103.0	90-110%

Associated Samples:
Batch GN93966: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GN93969: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GN94052: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GN94057: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GN94058: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GN94059: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GP50334: LA49190-1, LA49190-2, LA49190-3, LA49190-5
Batch GP50364: LA49190-4
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: LA49190
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	GN94057	TD29532-2A	mg/l	236	236	0.0	0-10%
Bromide	GP50334/GN94140	TD30097-1	mg/l	1.4	1.4	0.0	0-19%
Bromide	GP50364/GN94208	LA49190-4	mg/l	0.50	0.50	0.0	0-19%
Chloride	GP50334/GN94140	TD30097-1	mg/l	251	252	0.4	0-13%
Chloride	GP50364/GN94208	LA49190-4	mg/l	58.3	58.3	0.0	0-13%
Nitrogen, Nitrate	GP50334/GN94140	TD30097-1	mg/l	1.0	1.2	18.2(a)	0-14%
Silica, Dissolved	GN93969	LA49190-5	mg/l	5.6	0.0	0.0	0-20%
Solids, Total Dissolved	GN93966	LA49127-2	mg/l	524	535	2.1	0-5%
Specific Conductivity	GN94052	LA49190-1	umhos/cm	790	790	0.0	0-10%
Sulfate	GP50334/GN94140	TD30097-1	mg/l	1210	1200	0.8	0-20%
Sulfate	GP50364/GN94208	LA49190-4	mg/l	0.42	0.42	0.0	0-20%

Associated Samples:
Batch GN93966: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GN93969: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GN94052: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GN94057: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GP50334: LA49190-1, LA49190-2, LA49190-3, LA49190-5
Batch GP50364: LA49190-4
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: LA49190
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	GN94057	TD29532-2A	mg/l	236	50	258	88.0	75-117%
Bromide	GP50334/GN94140	TD30097-1	mg/l	1.4	10	11.8	104.0	80-120%
Bromide	GP50364/GN94208	LA49190-4	mg/l	0.50	10	10.8	103.0	80-120%
Chloride	GP50334/GN94140	TD30097-1	mg/l	251	500	771	104.0	80-120%
Chloride	GP50364/GN94208	LA49190-4	mg/l	58.3	50	119	121.4N	80-120%
Nitrogen, Nitrate	GP50334/GN94140	TD30097-1	mg/l	1.0	10	10.3	93.0	80-120%
Silica, Dissolved	GN93969	LA49190-5	mg/l	5.6	1.07	0.85	79.0	75-125%
Sulfate	GP50334/GN94140	TD30097-1	mg/l	1210	1000	2200	99.0	80-120%
Sulfate	GP50364/GN94208	LA49190-4	mg/l	0.42	10	10.7	102.8	80-120%

Associated Samples:
Batch GN93969: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GN94057: LA49190-1, LA49190-2, LA49190-3, LA49190-4, LA49190-5
Batch GP50334: LA49190-1, LA49190-2, LA49190-3, LA49190-5
Batch GP50364: LA49190-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits