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Automated Report

Technical Report for

Hydro-Environmental Technology, Inc.

8060.00 (RL) Indigo-Desoto Parish, LA

SGS Job Number: LA47398

Sampling Dates: 09/04/18 - 09/05/18

Report to:

Hydro-Environmental Technology
P.O. BOX 60295
Lafayette, LA 70596
labdata@hetinc.us

ATTN: Stewart L Stover, Jr.

Total number of pages in report: 223

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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Test results relate only to samples analyzed.

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Hydro-Environmental Technologies, Inc.
ATTN: Stewart L. Stover
P. O. Box 60295
Lafayette, LA 70596

RE: SGS Job #L47368
8060.00 Indigo-Desoto Parish, LA

The final report for SGS job number above has been edited to reflect changes to your data package. These edits have been incorporated into the revised report which is attached.

At the request of the client, the reporting limits have been adjusted to meet the standard method/or insrument reporting limits.

Our apologies for any inconvenience the above issue may have caused you. Please contact me at 337-237-4775 if I may be of further assistance in this matter, or if you have any further questions regarding this data report.

Sincerely,

Ralph Frye
Environment, Health and Safety
Project Manager
SGS North America Inc.-Scott

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SGS North America Inc.

Sample Summary

Hydro-Environmental Technology, Inc.

8060.00 (RL) Indigo-Desoto Parish, LA

Job No: LA47398

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
LA47398-1	09/04/18	10:45	KC/LV	09/06/18	AQ	Water	HANSON RELIEF WELL
LA47398-1F	09/04/18	10:45	KC/LV	09/06/18	AQ	Water Filtered	HANSON RELIEF WELL
LA47398-1R	09/04/18	10:45	KC/LV	09/06/18	AQ	Water	HANSON RELIEF WELL
LA47398-2	09/04/18	11:40	KC/LV	09/06/18	AQ	Water	BILLINGSLEY RELIEF WELL
LA47398-2F	09/04/18	11:40	KC/LV	09/06/18	AQ	Water Filtered	BILLINGSLEY RELIEF WELL
LA47398-3	09/04/18	14:50	KC/LV	09/06/18	AQ	Water	DAVID MASON RELIEF WELL
LA47398-3F	09/04/18	14:50	KC/LV	09/06/18	AQ	Water Filtered	DAVID MASON RELIEF WELL
LA47398-3R	09/04/18	14:50	KC/LV	09/06/18	AQ	Water	DAVID MASON RELIEF WELL
LA47398-4	09/04/18	16:30	KC/LV	09/06/18	AQ	Water	DENNISON RIG SUPPLY WELL
LA47398-4F	09/04/18	16:30	KC/LV	09/06/18	AQ	Water Filtered	DENNISON RIG SUPPLY WELL
LA47398-5	09/04/18	16:45	KC/LV	09/06/18	AQ	Water	GAMBLE RIG SUPPLY WELL
LA47398-5F	09/04/18	16:45	KC/LV	09/06/18	AQ	Water Filtered	GAMBLE RIG SUPPLY WELL
LA47398-6	09/04/18	16:35	KC/LV	09/06/18	AQ	Water	FIELD DUPLICATE

Sample Summary
(continued)

Hydro-Environmental Technology, Inc.

Job No: LA47398

8060.00 (RL) Indigo-Desoto Parish, LA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
LA47398-6F	09/04/18	16:35	KC/LV	09/06/18	AQ	Water Filtered	FIELD DUPLICATE
LA47398-7	09/05/18	11:45	KC/LV	09/06/18	AQ	Water	BRYANT POND 2'
LA47398-7F	09/05/18	11:45	KC/LV	09/06/18	AQ	Water Filtered	BRYANT POND 2'
LA47398-8	09/05/18	11:15	KC/LV	09/06/18	AQ	Water	BRYANT POND 7'
LA47398-8F	09/05/18	11:15	KC/LV	09/06/18	AQ	Water Filtered	BRYANT POND 7'
LA47398-9	09/05/18	10:45	KC/LV	09/06/18	AQ	Water	BRYANT POND 12'
LA47398-9F	09/05/18	10:45	KC/LV	09/06/18	AQ	Water Filtered	BRYANT POND 12'
LA47398-10	09/04/18	10:40	KC/LV	09/06/18	AQ	Equipment Blank	EQUIPMENT BLANK
LA47398-10F	09/04/18	10:40	KC/LV	09/06/18	AQ	Equip Blank Filtered	EQUIPMENT BLANK
LA47398-11	09/04/18	06:50	KC/LV	09/06/18	AQ	Trip Blank Water	TRIP BLANK
LA47398-12	09/04/18	06:50	KC/LV	09/06/18	AQ	Trip Blank Water	TRIP BLANK 2
LA47398-13	09/04/18	06:50	KC/LV	09/06/18	AQ	Trip Blank Water	TRIP BLANK 3
LA47398-14	09/04/18	06:50	KC/LV	09/06/18	AQ	Trip Blank Water	TRIP BLANK 4

Sample Summary
(continued)

Hydro-Environmental Technology, Inc.

Job No: LA47398

8060.00 (RL) Indigo-Desoto Parish, LA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
LA47398-15	09/04/18	10:30	KC/LV	09/06/18	AQ	Field Blank Water	FIELD BLANK
LA47398-16	09/05/18	06:45	KC/LV	09/06/18	AQ	Trip Blank Water	TRIP BLANK
LA47398-17	09/05/18	06:45	KC/LV	09/06/18	AQ	Trip Blank Water	TRIP BLANK 2
LA47398-18	09/05/18	08:00	KC/LV	09/06/18	AQ	Field Blank Water	FIELD BLANK

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038491.D	1	09/12/18 16:59	NN	n/a	n/a	V1I1787
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	0.0372	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:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	0.0198	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)	0.0062	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	95%		84-124%
2037-26-5	Toluene-D8	98%		83-115%
460-00-4	4-Bromofluorobenzene	97%		89-111%

ND = Not detected
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SGS North America Inc.

Report of Analysis

Client Sample ID:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024623.D	1	09/15/18 13:31	PC	09/11/18 08:00	OP12226	EA634
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	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

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N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	35%		23-85%
4165-62-2	Phenol-d5	28%		10-69%
118-79-6	2,4,6-Tribromophenol	47%		48-138%
4165-60-0	Nitrobenzene-d5	42%		51-128%
321-60-8	2-Fluorobiphenyl	39%		55-122%
1718-51-0	Terphenyl-d14	49%		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:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LE335981.D	1	09/07/18 13:52	SV	n/a	n/a	GLE1483
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Volatile Petroleum Hydrocarbons (VPH)

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	105%		70-130%
615-59-8	2,5-Dibromotoluene	90%		70-130%

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:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113134.D	1	09/11/18 05:35	DF	09/09/18 11:00	OP12214	GLK724
Run #2							

	Initial Volume	Final Volume
Run #1	35.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	109%		55-149%
348-51-6	1-Chloro-2-fluorobenzene	118%		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:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050690.D	1	09/10/18 19:32	JT	09/08/18 10:00	OP12205	GLB1598
Run #2	Y0050690.D	1	09/10/18 19:33	JT	09/08/18 10:00	OP12205	GLB1599

	Initial Volume	Final Volume
Run #1	56.9 ml	4.0 ml
Run #2	56.9 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		84%	40-140%
84-15-1	o-Terphenyl	97%		40-140%
321-60-8	2-Fluorobiphenyl	81%		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:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	60.2	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	0.0180	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	13.8	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	27.4	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	0.113	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	70.9	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	0.0400	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	20.9	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	1.41	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	11.6	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	371	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.814	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	0.244	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	415	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	< 5.0	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	420	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	0.62	0.50	mg/l	1	09/11/18 17:23	ATX	SW846 9056A
Chloride [a]	71.9	2.5	mg/l	5	09/11/18 16:44	ATX	SW846 9056A
Silica, Dissolved [a]	13.8	0.70	mg/l	10	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	844	40	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	1350	1.0	umhos/cm	1	09/10/18 18:20	ATX	EPA 120.1
Sulfate [a]	2.5	0.50	mg/l	1	09/11/18 17:23	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:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1F	**Date Sampled:**	09/04/18
Matrix:	AQ - Water Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	12.8	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	1.61	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	10.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	0.0222	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	12.8	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	4.47	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	0.300	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	4.89	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	412	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.368	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HANSON RELIEF WELL		
Lab Sample ID:	LA47398-1R	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2I038360.D	1	09/11/18 08:33	NN	n/a	n/a	V2I1781
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	0.0350	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		84-124%
2037-26-5	Toluene-D8	97%		83-115%
460-00-4	4-Bromofluorobenzene	98%		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:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038493.D	1	09/12/18 17:27	NN	n/a	n/a	V1I1787
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
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N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	99%		84-124%
2037-26-5	Toluene-D8	98%		83-115%
460-00-4	4-Bromofluorobenzene	96%		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:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024624.D	1	09/15/18 13:55	PC	09/11/18 08:00	OP12226	EA634
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	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	54%		23-85%
4165-62-2	Phenol-d5	41%		10-69%
118-79-6	2,4,6-Tribromophenol	75%		48-138%
4165-60-0	Nitrobenzene-d5	71%		51-128%
321-60-8	2-Fluorobiphenyl	66%		55-122%
1718-51-0	Terphenyl-d14	75%		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:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LE335982.D	1	09/07/18 14:25	SV	n/a	n/a	GLE1483
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%		70-130%
615-59-8	2,5-Dibromotoluene	92%		70-130%

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:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113135.D	1	09/11/18 05:52	DF	09/09/18 11:00	OP12214	GLK724
Run #2							

	Initial Volume	Final Volume
Run #1	35.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	102%		55-149%
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:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050694.D	1	09/10/18 21:04	JT	09/08/18 10:00	OP12205	GLB1598
Run #2	Y0050694.D	1	09/10/18 21:05	JT	09/08/18 10:00	OP12205	GLB1599

	Initial Volume	Final Volume
Run #1	56.9 ml	4.0 ml
Run #2	56.9 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		88%	40-140%
84-15-1	o-Terphenyl	97%		40-140%
321-60-8	2-Fluorobiphenyl	81%		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:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3.18	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.0424	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	1.25	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	2.32	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	1.02	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	0.0469	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	1.43	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	275	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.0795	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	262	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	7.8	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	270	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	0.58	0.50	mg/l	1	09/11/18 17:40	ATX	SW846 9056A
Chloride [a]	58.5	2.5	mg/l	5	09/11/18 17:01	ATX	SW846 9056A
Silica, Dissolved [a]	14.4	0.70	mg/l	10	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	565	10	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	1020	1.0	umhos/cm	1	09/10/18 18:20	ATX	EPA 120.1
Sulfate [a]	< 0.50	0.50	mg/l	1	09/11/18 17:40	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:	BILLINGSLEY RELIEF WELL		
Lab Sample ID:	LA47398-2F	**Date Sampled:**	09/04/18
Matrix:	AQ - Water Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.0172	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	< 0.020	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	247	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.0607	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038495.D	1	09/12/18 17:55	NN	n/a	n/a	V1I1787
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	0.106	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:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	0.0885	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	0.0129	0.0050	mg/l	
95-47-6	o-Xylene	ND	0.0050	mg/l	
1330-20-7	Xylene (total)	0.0169	0.0050	mg/l	

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

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N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024625.D	1	09/15/18 14:19	PC	09/11/18 08:00	OP12226	EA634
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	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	7%		23-85%
4165-62-2	Phenol-d5	6%		10-69%
118-79-6	2,4,6-Tribromophenol	6%		48-138%
4165-60-0	Nitrobenzene-d5	7%		51-128%
321-60-8	2-Fluorobiphenyl	6%		55-122%
1718-51-0	Terphenyl-d14	8%		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:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LE335983.D	1	09/07/18 14:58	SV	n/a	n/a	GLE1483
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.)	0.206	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%		70-130%
615-59-8	2,5-Dibromotoluene	90%		70-130%

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:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113136.D	1	09/11/18 06:09	DF	09/09/18 11:00	OP12214	GLK724
Run #2 [a]	LK113198.D	1	09/14/18 05:18	DF	09/13/18 15:00	OP12251	GLK726

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

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	19% [b]	47%	55-149%
348-51-6	1-Chloro-2-fluorobenzene	20% [b]	51%	55-149%

(a) Confirmation run for surrogate recoveries.
(b) Confirmed by reanalysis.

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:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050695.D	1	09/10/18 21:26	JT	09/08/18 10:00	OP12205	GLB1598
Run #2	Y0050695.D	1	09/10/18 21:27	JT	09/08/18 10:00	OP12205	GLB1599

	Initial Volume	Final Volume
Run #1	56.5 ml	4.0 ml
Run #2	56.5 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		79%	40-140%
84-15-1	o-Terphenyl	93%		40-140%
321-60-8	2-Fluorobiphenyl	84%		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:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	223	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	0.0474	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	4.44	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	56.5	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	0.330	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	226	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	0.151	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	66.1	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	4.01	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	0.00080	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	34.7	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	354	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	2.64	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	0.814	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	436	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	< 5.0	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	440	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	0.64	0.50	mg/l	1	09/11/18 17:57	ATX	SW846 9056A
Chloride [a]	80.1	5.0	mg/l	10	09/11/18 17:18	ATX	SW846 9056A
Silica, Dissolved [a]	12.1	0.70	mg/l	10	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	1040	200	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	1420	1.0	umhos/cm	1	09/10/18 18:20	ATX	EPA 120.1
Sulfate [a]	6.4	0.50	mg/l	1	09/11/18 17:57	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:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3F	**Date Sampled:**	09/04/18
Matrix:	AQ - Water Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	25.2	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.456	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	7.24	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	0.0358	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	19.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	0.0145	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	6.27	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	0.315	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	6.46	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	360	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.470	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	0.0563	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	DAVID MASON RELIEF WELL		
Lab Sample ID:	LA47398-3R	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2I038362.D	1	09/11/18 09:01	NN	n/a	n/a	V2I1781
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	0.102	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		84-124%
2037-26-5	Toluene-D8	97%		83-115%
460-00-4	4-Bromofluorobenzene	97%		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:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038497.D	1	09/12/18 18:23	NN	n/a	n/a	V1I1787
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:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	100%		84-124%
2037-26-5	Toluene-D8	99%		83-115%
460-00-4	4-Bromofluorobenzene	96%		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:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024626.D	1	09/15/18 14:43	PC	09/11/18 08:00	OP12226	EA634
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	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	65%		23-85%
4165-62-2	Phenol-d5	49%		10-69%
118-79-6	2,4,6-Tribromophenol	95%		48-138%
4165-60-0	Nitrobenzene-d5	85%		51-128%
321-60-8	2-Fluorobiphenyl	80%		55-122%
1718-51-0	Terphenyl-d14	91%		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:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LE335984.D	1	09/07/18 15:31	SV	n/a	n/a	GLE1483
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%		70-130%
615-59-8	2,5-Dibromotoluene	91%		70-130%

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:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113137.D	1	09/11/18 06:27	DF	09/09/18 11:00	OP12214	GLK724
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	98%		55-149%
348-51-6	1-Chloro-2-fluorobenzene	107%		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:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050696.D	1	09/10/18 21:49	JT	09/08/18 10:00	OP12205	GLB1598
Run #2	Y0050696.D	1	09/10/18 21:50	JT	09/08/18 10:00	OP12205	GLB1599

	Initial Volume	Final Volume
Run #1	56.9 ml	4.0 ml
Run #2	56.9 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		78%	40-140%
84-15-1	o-Terphenyl	93%		40-140%
321-60-8	2-Fluorobiphenyl	86%		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:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.0236	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	< 0.020	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	377	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.0883	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	486	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	19.0	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	505	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	0.78	0.50	mg/l	1	09/11/18 18:14	ATX	SW846 9056A
Chloride [a]	127	5.0	mg/l	10	09/11/18 17:35	ATX	SW846 9056A
Silica, Dissolved [a]	12.1	0.70	mg/l	10	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	860	10	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	1490	1.0	umhos/cm	1	09/10/18 18:20	ATX	EPA 120.1
Sulfate [a]	< 0.50	0.50	mg/l	1	09/11/18 18:14	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:	DENNISON RIG SUPPLY WELL		
Lab Sample ID:	LA47398-4F	**Date Sampled:**	09/04/18
Matrix:	AQ - Water Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.0247	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	1.12	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	< 0.020	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	1.08	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	453	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.105	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038499.D	1	09/12/18 18:51	NN	n/a	n/a	V1I1787
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:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	101%		84-124%
2037-26-5	Toluene-D8	99%		83-115%
460-00-4	4-Bromofluorobenzene	96%		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:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024627.D	1	09/15/18 15:07	PC	09/11/18 08:00	OP12226	EA634
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	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	64%		23-85%
4165-62-2	Phenol-d5	49%		10-69%
118-79-6	2,4,6-Tribromophenol	90%		48-138%
4165-60-0	Nitrobenzene-d5	83%		51-128%
321-60-8	2-Fluorobiphenyl	79%		55-122%
1718-51-0	Terphenyl-d14	89%		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:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LE335985.D	1	09/07/18 16:03	SV	n/a	n/a	GLE1483
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%		70-130%
615-59-8	2,5-Dibromotoluene	91%		70-130%

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:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113138.D	1	09/11/18 06:44	DF	09/09/18 11:00	OP12214	GLK724
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	101%		55-149%
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:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050697.D	1	09/10/18 22:11	JT	09/08/18 10:00	OP12205	GLB1598
Run #2	Y0050697.D	1	09/10/18 22:12	JT	09/08/18 10:00	OP12205	GLB1599

	Initial Volume	Final Volume
Run #1	56.6 ml	4.0 ml
Run #2	56.6 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		80%	40-140%
84-15-1	o-Terphenyl	70%		40-140%
321-60-8	2-Fluorobiphenyl	61%		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:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.0229	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	< 0.020	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	378	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.0919	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	429	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	15.4	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	445	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	0.75	0.50	mg/l	1	09/11/18 19:05	ATX	SW846 9056A
Chloride [a]	114	5.0	mg/l	10	09/11/18 18:26	ATX	SW846 9056A
Silica, Dissolved [a]	12.7	0.70	mg/l	10	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	833	10	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	1460	1.0	umhos/cm	1	09/10/18 18:20	ATX	EPA 120.1
Sulfate [a]	0.59	0.50	mg/l	1	09/11/18 19:05	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:	GAMBLE RIG SUPPLY WELL		
Lab Sample ID:	LA47398-5F	**Date Sampled:**	09/04/18
Matrix:	AQ - Water Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.0230	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	1.04	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	< 0.020	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	1.06	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	407	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.101	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD DUPLICATE		
Lab Sample ID:	LA47398-6	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038501.D	1	09/12/18 19:19	NN	n/a	n/a	V1I1787
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 DUPLICATE		
Lab Sample ID:	LA47398-6	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	102%		84-124%
2037-26-5	Toluene-D8	99%		83-115%
460-00-4	4-Bromofluorobenzene	98%		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 DUPLICATE		
Lab Sample ID:	LA47398-6	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024628.D	1	09/15/18 15:31	PC	09/11/18 08:00	OP12226	EA634
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	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

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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:	FIELD DUPLICATE		
Lab Sample ID:	LA47398-6	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	60%		23-85%
4165-62-2	Phenol-d5	47%		10-69%
118-79-6	2,4,6-Tribromophenol	87%		48-138%
4165-60-0	Nitrobenzene-d5	80%		51-128%
321-60-8	2-Fluorobiphenyl	77%		55-122%
1718-51-0	Terphenyl-d14	89%		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:	FIELD DUPLICATE		
Lab Sample ID:	LA47398-6	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LE335991.D	1	09/07/18 19:23	SV	n/a	n/a	GLE1483
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	109%		70-130%
615-59-8	2,5-Dibromotoluene	98%		70-130%

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 DUPLICATE		
Lab Sample ID:	LA47398-6	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113139.D	1	09/11/18 07:01	DF	09/09/18 11:00	OP12214	GLK724
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	99%		55-149%
348-51-6	1-Chloro-2-fluorobenzene	107%		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:	FIELD DUPLICATE		
Lab Sample ID:	LA47398-6	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050698.D	1	09/10/18 22:34	JT	09/08/18 10:00	OP12205	GLB1598
Run #2	Y0050698.D	1	09/10/18 22:35	JT	09/08/18 10:00	OP12205	GLB1599

	Initial Volume	Final Volume
Run #1	56.9 ml	4.0 ml
Run #2	56.9 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		79%	40-140%
84-15-1	o-Terphenyl	79%		40-140%
321-60-8	2-Fluorobiphenyl	68%		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:	FIELD DUPLICATE		
Lab Sample ID:	LA47398-6	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.0226	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	< 0.020	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	395	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.0889	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD DUPLICATE		
Lab Sample ID:	LA47398-6	**Date Sampled:**	09/04/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	485	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	19.9	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	505	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	0.77	0.50	mg/l	1	09/11/18 19:22	ATX	SW846 9056A
Chloride [a]	130	5.0	mg/l	10	09/11/18 18:59	ATX	SW846 9056A
Silica, Dissolved [a]	11.5	0.70	mg/l	10	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	833	10	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	1490	1.0	umhos/cm	1	09/10/18 18:20	ATX	EPA 120.1
Sulfate [a]	< 0.50	0.50	mg/l	1	09/11/18 19:22	ATX	SW846 9056A

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

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	FIELD DUPLICATE		
Lab Sample ID:	LA47398-6F	**Date Sampled:**	09/04/18
Matrix:	AQ - Water Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.0248	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	1.04	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	< 0.020	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	1.13	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	444	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.0992	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038509.D	1	09/12/18 21:13	NN	n/a	n/a	V1I1787
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:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	100%		84-124%
2037-26-5	Toluene-D8	98%		83-115%
460-00-4	4-Bromofluorobenzene	96%		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:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024629.D	1	09/15/18 15:55	PC	09/11/18 08:00	OP12226	EA634
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	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	60%		23-85%
4165-62-2	Phenol-d5	46%		10-69%
118-79-6	2,4,6-Tribromophenol	84%		48-138%
4165-60-0	Nitrobenzene-d5	78%		51-128%
321-60-8	2-Fluorobiphenyl	71%		55-122%
1718-51-0	Terphenyl-d14	84%		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:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LE335992.D	1	09/07/18 19:57	SV	n/a	n/a	GLE1483
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	113%		70-130%
615-59-8	2,5-Dibromotoluene	100%		70-130%

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:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113140.D	1	09/11/18 07:18	DF	09/09/18 11:00	OP12214	GLK724
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	104%		55-149%
348-51-6	1-Chloro-2-fluorobenzene	114%		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:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050699.D	1	09/10/18 22:56	JT	09/08/18 10:00	OP12205	GLB1598
Run #2	Y0050699.D	1	09/10/18 22:57	JT	09/08/18 10:00	OP12205	GLB1599

	Initial Volume	Final Volume
Run #1	56.5 ml	4.0 ml
Run #2	56.5 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		64%	40-140%
84-15-1	o-Terphenyl	92%		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:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3.04	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.216	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	7.84	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	2.46	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	2.64	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	0.0201	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	2.19	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	111	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.330	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	148	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	< 5.0	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	151	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	< 0.50	0.50	mg/l	1	09/11/18 20:12	ATX	SW846 9056A
Chloride [a]	26.9	1.0	mg/l	2	09/11/18 19:16	ATX	SW846 9056A
Silica, Dissolved [a]	5.3	0.14	mg/l	2	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	327	10	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	470	1.0	umhos/cm	1	09/10/18 18:20	ATX	EPA 120.1
Sulfate [a]	10.2	0.50	mg/l	1	09/11/18 20:12	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:	BRYANT POND 2'		
Lab Sample ID:	LA47398-7F	**Date Sampled:**	09/05/18
Matrix:	AQ - Water Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3.08	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.182	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	7.08	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	2.05	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	2.44	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	< 0.020	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	2.01	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	107	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.302	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038511.D	1	09/12/18 21:39	NN	n/a	n/a	V1I1787
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:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	98%		83-115%
460-00-4	4-Bromofluorobenzene	96%		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:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024630.D	1	09/15/18 16:20	PC	09/11/18 08:00	OP12226	EA634
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	ND	0.0044	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0044	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0044	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0088	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0044	mg/l	
106-47-8	4-Chloroaniline	ND	0.0044	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0044	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0044	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0044	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0044	mg/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	0.0088	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0044	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0044	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0044	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0044	mg/l	

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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:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	12%		23-85%
4165-62-2	Phenol-d5	13%		10-69%
118-79-6	2,4,6-Tribromophenol	16%		48-138%
4165-60-0	Nitrobenzene-d5	6%		51-128%
321-60-8	2-Fluorobiphenyl	3%		55-122%
1718-51-0	Terphenyl-d14	34%		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:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LE335993.D	1	09/07/18 20:30	SV	n/a	n/a	GLE1483
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	111%		70-130%
615-59-8	2,5-Dibromotoluene	98%		70-130%

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:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113142.D	1	09/11/18 07:53	DF	09/09/18 11:00	OP12214	GLK724
Run #2							

	Initial Volume	Final Volume
Run #1	35.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	103%		55-149%
348-51-6	1-Chloro-2-fluorobenzene	112%		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:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050700.D	1	09/10/18 23:19	JT	09/08/18 10:00	OP12205	GLB1598
Run #2	Y0050700.D	1	09/10/18 23:20	JT	09/08/18 10:00	OP12205	GLB1599

	Initial Volume	Final Volume
Run #1	57.1 ml	4.0 ml
Run #2	57.1 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		72%	40-140%
84-15-1	o-Terphenyl	75%		40-140%
321-60-8	2-Fluorobiphenyl	70%		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:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	0.0112	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.307	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	10.9	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	1.35	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	3.72	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	0.547	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	1.93	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	123	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.562	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	185	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	< 5.0	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	185	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	< 0.50	0.50	mg/l	1	09/11/18 20:29	ATX	SW846 9056A
Chloride [a]	28.0	0.50	mg/l	1	09/11/18 20:24	ATX	SW846 9056A
Silica, Dissolved [a]	8.0	0.14	mg/l	2	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	268	10	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	488	1.0	umhos/cm	1	09/10/18 18:20	ATX	EPA 120.1
Sulfate [a]	1.3	0.50	mg/l	1	09/11/18 20:29	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:	BRYANT POND 7'		
Lab Sample ID:	LA47398-8F	**Date Sampled:**	09/05/18
Matrix:	AQ - Water Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	0.0106	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.252	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	9.62	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	< 1.0	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	3.29	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	0.481	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	1.65	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	118	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.506	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038513.D	1	09/12/18 22:07	NN	n/a	n/a	V1I1787
Run #2 [a]	2I038352.D	1	09/11/18 06:41	NN	n/a	n/a	V2I1781

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

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:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	0.0106	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	93%	93%	84-124%
2037-26-5	Toluene-D8	98%	97%	83-115%
460-00-4	4-Bromofluorobenzene	98%	96%	89-111%

(a) Sample used for QC purposes only.

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:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024631.D	1	09/15/18 16:44	PC	09/11/18 08:00	OP12226	EA634
Run #2							

	Initial Volume	Final Volume
Run #1	111 ml	1.0 ml
Run #2		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	0.0045	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0045	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0045	mg/l	
51-28-5	2,4-Dinitrophenol	ND	0.018	mg/l	
100-02-7	4-Nitrophenol	ND	0.023	mg/l	
87-86-5	Pentachlorophenol	ND	0.00090	mg/l	
108-95-2	Phenol	ND	0.0045	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0045	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0045	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0045	mg/l	
83-32-9	Acenaphthene	ND	0.00018	mg/l	
208-96-8	Acenaphthylene	ND	0.00018	mg/l	
62-53-3	Aniline	ND	0.0045	mg/l	
120-12-7	Anthracene	ND	0.00018	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.00018	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.00018	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.00018	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.00018	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0090	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0045	mg/l	
106-47-8	4-Chloroaniline	ND	0.0045	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0045	mg/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.0045	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0045	mg/l	
218-01-9	Chrysene	ND	0.00018	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.00018	mg/l	
132-64-9	Dibenzofuran	ND	0.0045	mg/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	0.0090	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0045	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0045	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0045	mg/l	
99-65-0	1,3-Dinitrobenzene	ND	0.0045	mg/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

ABN RECAP LIST

CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	0.0045	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0045	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0045	mg/l	
206-44-0	Fluoranthene	ND	0.00018	mg/l	
86-73-7	Fluorene	ND	0.00018	mg/l	
118-74-1	Hexachlorobenzene	ND	0.00090	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.00045	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND	0.0090	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.00018	mg/l	
78-59-1	Isophorone	ND	0.0045	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.00018	mg/l	
91-20-3	Naphthalene	ND	0.00018	mg/l	
88-74-4	2-Nitroaniline	ND	0.0045	mg/l	
99-09-2	3-Nitroaniline	ND	0.0045	mg/l	
100-01-6	4-Nitroaniline	ND	0.0045	mg/l	
98-95-3	Nitrobenzene	ND	0.00090	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0045	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0045	mg/l	
85-01-8	Phenanthrene	ND	0.00018	mg/l	
129-00-0	Pyrene	ND	0.00018	mg/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.00090	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0045	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		23-85%
4165-62-2	Phenol-d5	47%		10-69%
118-79-6	2,4,6-Tribromophenol	89%		48-138%
4165-60-0	Nitrobenzene-d5	78%		51-128%
321-60-8	2-Fluorobiphenyl	75%		55-122%
1718-51-0	Terphenyl-d14	83%		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:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LE335994.D	1	09/07/18 21:04	SV	n/a	n/a	GLE1483
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	111%		70-130%
615-59-8	2,5-Dibromotoluene	100%		70-130%

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:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113143.D	1	09/11/18 08:10	DF	09/09/18 11:00	OP12214	GLK724
Run #2							

	Initial Volume	Final Volume
Run #1	35.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
348-51-6	1-Chloro-2-fluorobenzene	106%		55-149%
348-51-6	1-Chloro-2-fluorobenzene	117%		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:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050701.D	1	09/10/18 23:42	JT	09/08/18 10:00	OP12205	GLB1598
Run #2	Y0050701.D	1	09/10/18 23:43	JT	09/08/18 10:00	OP12205	GLB1599

	Initial Volume	Final Volume
Run #1	56.7 ml	4.0 ml
Run #2	56.7 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		68%	40-140%
84-15-1	o-Terphenyl	85%		40-140%
321-60-8	2-Fluorobiphenyl	69%		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:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	0.0234	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.521	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	14.6	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	10.8	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	4.17	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	1.05	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	2.24	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	118	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.797	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9	**Date Sampled:**	09/05/18
Matrix:	AQ - Water	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	211	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	< 5.0	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	211	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	< 0.50	0.50	mg/l	1	09/11/18 20:46	ATX	SW846 9056A
Chloride [a]	27.3	1.0	mg/l	2	09/11/18 20:41	ATX	SW846 9056A
Silica, Dissolved [a]	10.1	0.35	mg/l	5	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	298	10	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	541	1.0	umhos/cm	1	09/10/18 18:20	ATX	EPA 120.1
Sulfate [a]	0.58	0.50	mg/l	1	09/11/18 20:46	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:	BRYANT POND 12'		
Lab Sample ID:	LA47398-9F	**Date Sampled:**	09/05/18
Matrix:	AQ - Water Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) 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	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Arsenic	0.0227	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Barium	0.439	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Cadmium	< 0.0050	0.0050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Calcium	12.9	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Chromium	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Iron	9.98	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Lead	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Magnesium	3.91	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Manganese	0.954	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [2]	SW846 7470A [4]
Potassium	1.95	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Selenium	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Silver	< 0.010	0.010	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Sodium	112	1.0	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Strontium	0.741	0.020	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]
Zinc	< 0.050	0.050	mg/l	10	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13316
(3) Prep QC Batch: MP12641
(4) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10	**Date Sampled:**	09/04/18
Matrix:	AQ - Equipment Blank	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2I038284.D	1	09/10/18 14:49	NN	n/a	n/a	V2I1779
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:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10	**Date Sampled:**	09/04/18
Matrix:	AQ - Equipment Blank	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	96%		89-111%

ND = Not detected
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10	**Date Sampled:**	09/04/18
Matrix:	AQ - Equipment Blank	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A0024632.D	1	09/15/18 17:08	PC	09/11/18 08:00	OP12226	EA634
Run #2							

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

ABN RECAP LIST

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

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10	**Date Sampled:**	09/04/18
Matrix:	AQ - Equipment Blank	**Date Received:**	09/06/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

ABN RECAP LIST

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		23-85%
4165-62-2	Phenol-d5	36%		10-69%
118-79-6	2,4,6-Tribromophenol	74%		48-138%
4165-60-0	Nitrobenzene-d5	61%		51-128%
321-60-8	2-Fluorobiphenyl	59%		55-122%
1718-51-0	Terphenyl-d14	72%		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:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10	**Date Sampled:**	09/04/18
Matrix:	AQ - Equipment Blank	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC379893.D	1	09/07/18 22:05	MB	n/a	n/a	GLC1819
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	98%		70-130%
615-59-8	2,5-Dibromotoluene	98%		70-130%

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:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10	**Date Sampled:**	09/04/18
Matrix:	AQ - Equipment Blank	**Date Received:**	09/06/18
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LK113144.D	1	09/11/18 08:27	DF	09/09/18 11:00	OP12214	GLK724
Run #2							

	Initial Volume	Final Volume
Run #1	35.9 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	101%		55-149%
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:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10	**Date Sampled:**	09/04/18
Matrix:	AQ - Equipment Blank	**Date Received:**	09/06/18
Method:	MADEP EPH REV 1.1 SW846 3511	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0050722.D	1	09/11/18 14:43	JT	09/10/18 15:00	OP12207	GLB1602
Run #2	Y0050722.D	1	09/11/18 14:44	JT	09/10/18 15:00	OP12207	GLB1603

	Initial Volume	Final Volume
Run #1	57.0 ml	4.0 ml
Run #2	57.0 ml	4.0 ml

Louisiana EPH Ranges

CAS No.	Compound	Result	RL	Units	Q
	Aliphatics > C10-C12 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C12-C16 (Unadj.)	ND [a]	0.13	mg/l	
	Aliphatics > C16-C35 (Unadj.)	ND [a]	0.13	mg/l	
	Aromatics > C10-C12 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C12-C16 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C16-C21 (Unadj.)	ND	0.13	mg/l	
	Aromatics > C21-C35 (Unadj.)	ND	0.13	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane		77%	40-140%
84-15-1	o-Terphenyl	84%		40-140%
321-60-8	2-Fluorobiphenyl	81%		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:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10	**Date Sampled:**	09/04/18
Matrix:	AQ - Equipment Blank	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Arsenic	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Barium	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Cadmium	< 0.00050	0.00050	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Calcium	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Chromium	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Iron	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Lead	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Magnesium	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Manganese	< 0.0020	0.0020	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [3]	SW846 7470A [5]
Potassium	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Selenium	< 0.0050	0.0050	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Silver	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Sodium	< 0.10	0.10	mg/l	1	09/06/18	09/10/18	RT	SW846 6020A [2]	SW846 3010A [4]
Strontium	< 0.0020	0.0020	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Zinc	< 0.0050	0.0050	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13312
(3) Instrument QC Batch: MA13316
(4) Prep QC Batch: MP12641
(5) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10	**Date Sampled:**	09/04/18
Matrix:	AQ - Equipment Blank	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate [a]	< 5.0	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Carbonate [a]	< 5.0	5.0	mg/l	1	09/12/18 17:40	ATX	SM18 2320B
Alkalinity, Total as CaCO3 [a]	< 5.0	5.0	mg/l	1	09/12/18 17:40	ATX	SM 2320B-2011
Bromide [a]	< 0.50	0.50	mg/l	1	09/11/18 21:03	ATX	SW846 9056A
Chloride [a]	< 0.50	0.50	mg/l	1	09/11/18 20:58	ATX	SW846 9056A
Silica, Dissolved [a]	< 0.070	0.070	mg/l	1	09/15/18	ATX	SM4500SIO2 C-2011
Solids, Total Dissolved [a]	< 10	10	mg/l	1	09/07/18 20:03	ATX	SM 2540C-2011
Specific Conductivity [b]	1.1	1.0	umhos/cm	1	09/10/18 15:55	ATX	EPA 120.1
Sulfate [a]	< 0.50	0.50	mg/l	1	09/11/18 21:03	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:	EQUIPMENT BLANK		
Lab Sample ID:	LA47398-10F	**Date Sampled:**	09/04/18
Matrix:	AQ - Equip Blank Filtered	**Date Received:**	09/06/18
		Percent Solids:	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Arsenic	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Barium	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Cadmium	< 0.00050	0.00050	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Calcium	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Chromium	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Iron	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Lead	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Magnesium	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Manganese	< 0.0020	0.0020	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Mercury	< 0.00020	0.00020	mg/l	1	09/07/18	09/10/18	SA	SW846 7470A [3]	SW846 7470A [5]
Potassium	< 0.10	0.10	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Selenium	< 0.0050	0.0050	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Silver	< 0.0010	0.0010	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Sodium	< 0.10	0.10	mg/l	1	09/06/18	09/10/18	RT	SW846 6020A [2]	SW846 3010A [4]
Strontium	< 0.0020	0.0020	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]
Zinc	< 0.0050	0.0050	mg/l	1	09/06/18	09/07/18	RT	SW846 6020A [1]	SW846 3010A [4]

(1) Instrument QC Batch: MA13287
(2) Instrument QC Batch: MA13312
(3) Instrument QC Batch: MA13316
(4) Prep QC Batch: MP12641
(5) Prep QC Batch: MP12665

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	LA47398-11	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q0441998.D	1	09/11/18 01:29	NN	n/a	n/a	V1Q2136
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:	LA47398-11	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	102%		84-124%
2037-26-5	Toluene-D8	99%		83-115%
460-00-4	4-Bromofluorobenzene	95%		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:	LA47398-11	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC379894.D	1	09/07/18 22:47	MB	n/a	n/a	GLC1819
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	97%		70-130%
615-59-8	2,5-Dibromotoluene	98%		70-130%

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 2		
Lab Sample ID:	LA47398-12	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038315.D	1	09/10/18 22:04	NN	n/a	n/a	V1I1779
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 2		
Lab Sample ID:	LA47398-12	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	91%		84-124%
2037-26-5	Toluene-D8	97%		83-115%
460-00-4	4-Bromofluorobenzene	94%		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 2		
Lab Sample ID:	LA47398-12	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC379885.D	1	09/07/18 16:32	MB	n/a	n/a	GLC1819
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	84%		70-130%
615-59-8	2,5-Dibromotoluene	85%		70-130%

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 3		
Lab Sample ID:	LA47398-13	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038317.D	1	09/10/18 22:32	NN	n/a	n/a	V1I1779
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 3		
Lab Sample ID:	LA47398-13	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	95%		84-124%
2037-26-5	Toluene-D8	97%		83-115%
460-00-4	4-Bromofluorobenzene	94%		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 3		
Lab Sample ID:	LA47398-13	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC379886.D	1	09/07/18 17:12	MB	n/a	n/a	GLC1819
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	87%		70-130%
615-59-8	2,5-Dibromotoluene	92%		70-130%

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 4		
Lab Sample ID:	LA47398-14	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1I038319.D	1	09/10/18 23:00	NN	n/a	n/a	V1I1779
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 4		
Lab Sample ID:	LA47398-14	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	91%		84-124%
2037-26-5	Toluene-D8	97%		83-115%
460-00-4	4-Bromofluorobenzene	97%		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 4		
Lab Sample ID:	LA47398-14	**Date Sampled:**	09/04/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC379887.D	1	09/07/18 17:53	MB	n/a	n/a	GLC1819
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	92%		70-130%
615-59-8	2,5-Dibromotoluene	92%		70-130%

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:	LA47398-15	**Date Sampled:**	09/04/18
Matrix:	AQ - Field Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2I038286.D	1	09/10/18 15:17	NN	n/a	n/a	V2I1779
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:	LA47398-15	**Date Sampled:**	09/04/18
Matrix:	AQ - Field Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	91%		84-124%
2037-26-5	Toluene-D8	98%		83-115%
460-00-4	4-Bromofluorobenzene	98%		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:	LA47398-15	**Date Sampled:**	09/04/18
Matrix:	AQ - Field Blank Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC379888.D	1	09/07/18 18:35	MB	n/a	n/a	GLC1819
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	95%		70-130%
615-59-8	2,5-Dibromotoluene	97%		70-130%

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:	LA47398-16	**Date Sampled:**	09/05/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q0441999.D	1	09/11/18 01:54	NN	n/a	n/a	V1Q2136
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:	LA47398-16	**Date Sampled:**	09/05/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	100%		84-124%
2037-26-5	Toluene-D8	99%		83-115%
460-00-4	4-Bromofluorobenzene	97%		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:	LA47398-16	**Date Sampled:**	09/05/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC379889.D	1	09/07/18 19:17	MB	n/a	n/a	GLC1819
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	99%		70-130%
615-59-8	2,5-Dibromotoluene	104%		70-130%

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 2		
Lab Sample ID:	LA47398-17	**Date Sampled:**	09/05/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0054613.D	1	09/11/18 16:55	NN	n/a	n/a	V2J1456
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 2		
Lab Sample ID:	LA47398-17	**Date Sampled:**	09/05/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	95%		84-124%
2037-26-5	Toluene-D8	97%		83-115%
460-00-4	4-Bromofluorobenzene	101%		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 2		
Lab Sample ID:	LA47398-17	**Date Sampled:**	09/05/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC379890.D	1	09/07/18 19:58	MB	n/a	n/a	GLC1819
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	97%		70-130%
615-59-8	2,5-Dibromotoluene	103%		70-130%

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:	LA47398-18	**Date Sampled:**	09/05/18
Matrix:	AQ - Field Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0054615.D	1	09/11/18 17:22	NN	n/a	n/a	V2J1456
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:	LA47398-18	**Date Sampled:**	09/05/18
Matrix:	AQ - Field Blank Water	**Date Received:**	09/06/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	8060.00 (RL) 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	97%		84-124%
2037-26-5	Toluene-D8	98%		83-115%
460-00-4	4-Bromofluorobenzene	97%		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:	LA47398-18	**Date Sampled:**	09/05/18
Matrix:	AQ - Field Blank Water	**Date Received:**	09/06/18
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC379895.D	1	09/07/18 23:30	MB	n/a	n/a	GLC1819
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	101%		70-130%
615-59-8	2,5-Dibromotoluene	106%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

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

LA47398

SAMPLE CHAIN-OF-CUSTODY RECORD

		Laboratory:	SGS Lafayette
Project Name:	Indigo	*Collected By:*	KC/LV/EM/MJ
Project Number:	8060.00	*Company:*	Hydro-Environmental Technology, Inc.
Project Location:	DeSoto Parish, Louisiana	*Date:*	9/4/2018

	Sample I.D.	Type	Date/Time Sampled		Containers	Analysis Requested/Method	Comments	
1	Hanson Relief Well	AQ	9/4/2018	10:45	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	16
2	Billingsley Relief Well	AQ	9/4/2018	11:40	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	16
3	David Mason Relief Well	AQ	9/4/2018	14:50	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	15
4	Dennison Rig Supply Well	AQ	9/4/2018	16:30	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	16
5	Gamble Rig Supply Well	AQ	9/4/2018	16:45	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	16

*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 Matte Date/Time: 9/6/18 1200	Received By: Johnny Hellani Date/Time: 9-6-18 1200
Relinquished By: Johnny Hellani Date/Time: 12:20	Relinquished By: [signature] Date/Time: 090618 12:20
Analysis Due: Verbal:	Written:

PSM cooler (5.4/4.5/4.9 (DV439) RLX 464 (VW)
RSM-9 (TB3), (W), (3W2) PL(W), (3W2F) PL(W), RW-3 (11B4)

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3 3.1

LA47398: Chain of Custody
Page 1 of 5

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

LA47398

SAMPLE CHAIN-OF-CUSTODY RECORD

Laboratory:	SGS Lafayette		
Project Name:	Indigo	*Collected By:*	KC/LV/EM/MJ
Project Number:	8060.00	*Company:*	Hydro-Environmental Technology, Inc.
Project Location:	DeSoto Parish, Louisiana	*Date:*	9/4/2018

	Sample I.D.	Type	Date/Time Sampled		Containers	Analysis Requested/Method	Comments	
6	Field Duplicate	AQ	9/4/2018	16:35	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	16
7	Bryant Pond 2'	AQ	9/5/2018	11:45	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	16
8	Bryant Pond 7'	AQ	9/5/2018	11:15	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	16
9	Bryant Pond 12'	AQ	9/5/2018	10:45	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	16
10	Equipment Blank	AQ	9/4/2018	10:40	(8) 40mL Glass HCl (3) 60mL Amber Glass HCl (2) 4oz Amber Glass (1) 500mL Plastic (2) 250mL Plastic HNO3	VOC 8260, SVOC 8270, VPH, EPH, Chlorides, TDS, Specific Conductance, Cations*, Anions*, Total Metals*, Dissolved Metals*	4°C Field filtered: Dissolved metals	16

*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

Received

Relinquished By: Eric Master	~~Relinquished~~ By: Johnny Hebert 9-6-18
Date/Time: 9/6/18 1200	Date/Time: 12:00
Relinquished By: Johnny Hebert	Relinquished By: 090618
Date/Time: 12:20	Date/Time: 1220
Analysis Due: Verbal:	Written:

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
Environmental Consultants
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Lafayette, LA 70596-0295
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LA47398

SAMPLE CHAIN-OF-CUSTODY RECORD

Laboratory:	SGS Lafayette		
Project Name:	Indigo	*Collected By:*	KC/LV/EM/MJ
Project Number:	8060.00	*Company:*	Hydro-Environmental Technology, Inc.
Project Location:	DeSoto Parish, Louisiana	*Date:*	9/4/2018

	Sample I.D.	Type	Date/Time Sampled		Containers	Analysis Requested/Method	Comments	
11	Trip Blank	AQ	9/4/2018	6:50	(6) 40mL Glass HCl ✓	VOC 8260, VPH	4°C	6
12	Trip Blank 2	AQ	9/4/2018	6:50	(6) 40mL Glass HCl ✓	VOC 8260, VPH	4°C	6
13	Trip Blank 3	AQ	9/4/2018	6:50	(6) 40mL Glass HCl ✓	VOC 8260, VPH	4°C	6
14	Trip Blank 4	AQ	9/4/2018	6:50	(6) 40mL Glass HCl ✓	VOC 8260, VPH	4°C	6
15	Field Blank	AQ	9/4/2018	10:30	(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

Rec'd

Relinquished By: Eric Mestas	Relinquished By: 9-6-18
Date/Time: 9/6/18 1200	Date/Time: Johnny K Harris 12:00
Relinquished By:	Relinquished By: 9-6-18
Date/Time: Johnny K Harris 12:20	Date/Time: 12:20
Analysis Due: Verbal:	Written:

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
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Lafayette, LA 70596-0295
Phone (337) 261-1963 FAX (337) 261-1953

LA47398

SAMPLE CHAIN-OF-CUSTODY RECORD

		Laboratory:	SGS Lafayette
Project Name:	Indigo	*Collected By:*	KC/LV/EM/MJ
Project Number:	8060.00	*Company:*	Hydro-Environmental Technology, Inc.
Project Location:	DeSoto Parish, Louisiana	*Date:*	9/4/2018

Sample I.D.	Type	Date/Time Sampled		Containers	Analysis Requested/Method	Comments
16 Trip Blank	AQ	9/5/2018	6:45	(6) 40mL Glass HCl ✓	VOC 8260, VPH	4°C 6
17 Trip Blank 2	AQ	9/5/2018	6:45	(6) 40mL Glass HCl ✓	VOC 8260, VPH	4°C 6
18 Field Blank	AQ	9/5/2018	8:00	(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

Received

Relinquished By: Eric Mott	Relinquished By: Johnny Hellen 9-6-18
Date/Time: 9/6/18 1200	Date/Time: 12:00
Relinquished By: Johnny Hellen	Relinquished By: Natalie 9-6-18
Date/Time: 12:20	Date/Time: 1200
Analysis Due: Verbal:	Written:

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LA47398: Chain of Custody
Page 4 of 5

SGS Sample Receipt Summary

Job Number: LA47398 **Client:** HYDRO **Project:** INDIGO

Date / Time Received: 9/6/2018 12:20:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (5.4/5.4); #2: (4.5/4.5); #3: (4.9/4.9);

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:	DV439		
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

Received 7 40ml HCL vials for Sample I.d. Gamble Rig Supply Well, COC states 8.

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: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1I1779-MB2	1I038279.D	1	09/10/18	NN	n/a	n/a	V1I1779

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

LA47398-12, LA47398-13, LA47398-14

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	0.35	1.0	ug/l	J
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: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1I1779-MB2	1I038279.D	1	09/10/18	NN	n/a	n/a	V1I1779

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

LA47398-12, LA47398-13, LA47398-14

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	90%	84-124%
2037-26-5	Toluene-D8	98%	83-115%
460-00-4	4-Bromofluorobenzene	96%	89-111%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I1779-MB2	2I038280.D	1	09/10/18	NN	n/a	n/a	V2I1779

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

LA47398-10, LA47398-15

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	2.5	50	ug/l	J
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
75-15-0	Carbon Disulfide	ND	1.0	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
67-66-3	Chloroform	0.33	1.0	ug/l	J
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 [a]	0.71	1.0	ug/l	J
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: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I1779-MB2	2I038280.D	1	09/10/18	NN	n/a	n/a	V2I1779

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

LA47398-10, LA47398-15

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	92%	84-124%
2037-26-5	Toluene-D8	96%	83-115%
460-00-4	4-Bromofluorobenzene	98%	89-111%

(a) Compound not detected in samples at less than 10 times the hit in the blank.

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1Q2136-MB2	1Q0441994.D	1	09/10/18	NN	n/a	n/a	V1Q2136

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

LA47398-11, LA47398-16

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	2.5	50	ug/l	J
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
75-15-0	Carbon Disulfide	ND	1.0	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
67-66-3	Chloroform	0.34	1.0	ug/l	J
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	1.2	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: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1Q2136-MB2	1Q0441994.D	1	09/10/18	NN	n/a	n/a	V1Q2136

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

LA47398-11, LA47398-16

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	100%	83-115%
460-00-4	4-Bromofluorobenzene	97%	89-111%

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I1781-MB2	2I038334.D	1	09/11/18	NN	n/a	n/a	V2I1781

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

LA47398-1R, LA47398-3R

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	93%	84-124%
2037-26-5	Toluene-D8	97%	83-115%
460-00-4	4-Bromofluorobenzene	93%	89-111%

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1456-MB2	2J0054611.D	1	09/11/18	NN	n/a	n/a	V2J1456

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

LA47398-17, LA47398-18

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/kg	
71-43-2	Benzene	ND	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	1.0	ug/kg	
75-25-2	Bromoform	ND	1.0	ug/kg	
75-15-0	Carbon Disulfide	ND	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	1.0	ug/kg	
75-00-3	Chloroethane	ND	1.0	ug/kg	
67-66-3	Chloroform	ND	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	1.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/kg	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	ug/kg	
67-72-1	Hexachloroethane	ND	5.0	ug/kg	
78-83-1	Isobutyl alcohol	ND	100	ug/kg	
74-83-9	Methyl Bromide	ND	10	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	ug/kg	
75-09-2	Methylene Chloride	ND	5.0	ug/kg	
78-93-3	Methyl Ethyl Ketone	ND	13	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	13	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/kg	
100-42-5	Styrene	ND	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/kg	

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1456-MB2	2J0054611.D	1	09/11/18	NN	n/a	n/a	V2J1456

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

LA47398-17, LA47398-18

CAS No.	Compound	Result	RL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	1.0	ug/kg	
	m,p-Xylene	ND	2.0	ug/kg	
95-47-6	o-Xylene	ND	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	ug/kg	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	96%	59-143%
2037-26-5	Toluene-D8	98%	52-159%
460-00-4	4-Bromofluorobenzene	102%	38-183%

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1I1787-MB2	1I038489.D	1	09/12/18	NN	n/a	n/a	V1I1787

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	2.0	50	ug/l	J
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
75-15-0	Carbon Disulfide	ND	1.0	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
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: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1I1787-MB2	1I038489.D	1	09/12/18	NN	n/a	n/a	V1I1787

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

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	94%	84-124%
2037-26-5	Toluene-D8	98%	83-115%
460-00-4	4-Bromofluorobenzene	98%	89-111%

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1I1779-BS1	1I038273.D	1	09/10/18	NN	n/a	n/a	V1I1779
V1I1779-BSD1	1I038275.D	1	09/10/18	NN	n/a	n/a	V1I1779

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

LA47398-12, LA47398-13, LA47398-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	51.9	104	51.2	102	1	38-178/30
71-43-2	Benzene	20	20.8	104	19.6	98	6	82-119/30
75-27-4	Bromodichloromethane	20	19.6	98	18.5	93	6	79-120/30
75-25-2	Bromoform	20	18.5	93	17.2	86	7	68-128/30
75-15-0	Carbon Disulfide	20	27.6	138* [a]	26.8	134* [a]	3	64-133/30
56-23-5	Carbon Tetrachloride	20	20.3	102	19.1	96	6	69-132/30
108-90-7	Chlorobenzene	20	21.3	107	20.1	101	6	85-120/30
75-00-3	Chloroethane	20	16.9	85	16.8	84	1	33-170/30
67-66-3	Chloroform	20	19.5	98	18.5	93	5	80-122/30
124-48-1	Dibromochloromethane	20	21.5	108	20.7	104	4	73-125/30
96-12-8	1,2-Dibromo-3-chloropropane	20	18.8	94	17.3	87	8	67-131/30
541-73-1	m-Dichlorobenzene	20	20.3	102	19.1	96	6	84-121/30
95-50-1	o-Dichlorobenzene	20	19.7	99	18.4	92	7	83-120/30
106-46-7	p-Dichlorobenzene	20	20.3	102	19.4	97	5	83-122/30
75-34-3	1,1-Dichloroethane	20	19.9	100	18.8	94	6	78-124/30
107-06-2	1,2-Dichloroethane	20	20.6	103	19.4	97	6	74-127/30
75-35-4	1,1-Dichloroethylene	20	24.5	123	23.7	119	3	70-134/30
156-59-2	cis-1,2-Dichloroethylene	20	20.8	104	19.6	98	6	78-122/30
156-60-5	trans-1,2-Dichloroethylene	20	22.0	110	21.4	107	3	75-127/30
540-59-0	1,2-Dichloroethene (total)	40	42.8	107	41.0	103	4	78-123/30
78-87-5	1,2-Dichloropropane	20	20.2	101	19.2	96	5	82-120/30
10061-01-5	cis-1,3-Dichloropropene	20	20.5	103	19.1	96	7	79-122/30
10061-02-6	trans-1,3-Dichloropropene	20	20.0	100	18.7	94	7	78-124/30
542-75-6	1,3-Dichloropropene (total)	40	40.5	101	37.9	95	7	50-150/30 [b]
100-41-4	Ethylbenzene	20	20.8	104	19.7	99	5	84-117/30
67-72-1	Hexachloroethane	20	19.2	96	18.1	91	6	53-141/30
78-83-1	Isobutyl Alcohol	200	176	88	158	79	11	20-175/30
74-83-9	Methyl Bromide	20	20.8	104	19.4	97	7	37-198/30
74-87-3	Methyl Chloride	20	17.0	85	15.7	79	8	50-136/30
75-09-2	Methylene Chloride	20	20.8	104	20.5	103	1	71-130/30
78-93-3	Methyl Ethyl Ketone	50	47.9	96	44.5	89	7	59-149/30
108-10-1	4-Methyl-2-pentanone	50	48.9	98	47.2	94	4	74-131/30
1634-04-4	Methyl Tert Butyl Ether	20	20.2	101	17.5	88	14	70-126/30
100-42-5	Styrene	20	21.1	106	19.9	100	6	79-128/30
630-20-6	1,1,1,2-Tetrachloroethane	20	22.2	111	20.7	104	7	84-120/30
79-34-5	1,1,2,2-Tetrachloroethane	20	20.7	104	20.2	101	2	77-126/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1I1779-BS1	1I038273.D	1	09/10/18	NN	n/a	n/a	V1I1779
V1I1779-BSD1	1I038275.D	1	09/10/18	NN	n/a	n/a	V1I1779

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

LA47398-12, LA47398-13, LA47398-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	20	21.4	107	20.3	102	5	75-133/30
108-88-3	Toluene	20	19.5	98	18.6	93	5	80-121/30
71-55-6	1,1,1-Trichloroethane	20	20.1	101	19.2	96	5	74-126/30
79-00-5	1,1,2-Trichloroethane	20	20.4	102	19.6	98	4	80-123/30
79-01-6	Trichloroethylene	20	22.2	111	21.0	105	6	62-125/30
75-69-4	Trichlorofluoromethane	20	19.9	100	19.4	97	3	62-148/30
75-01-4	Vinyl Chloride	20	17.0	85	17.0	85	0	67-130/30
	m,p-Xylene	40	41.7	104	39.4	99	6	82-121/30
95-47-6	o-Xylene	20	20.4	102	19.3	97	6	84-119/30
1330-20-7	Xylene (total)	60	62.1	104	58.7	98	6	81-122/30

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

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

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I1779-BS1	2I038274.D	1	09/10/18	NN	n/a	n/a	V2I1779
V2I1779-BSD1	2I038276.D	1	09/10/18	NN	n/a	n/a	V2I1779

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

LA47398-10, LA47398-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	52.5	105	50.3	101	4	38-178/30
71-43-2	Benzene	20	20.0	100	20.1	101	0	82-119/30
75-27-4	Bromodichloromethane	20	19.6	98	19.2	96	2	79-120/30
75-25-2	Bromoform	20	17.3	87	17.4	87	1	68-128/30
75-15-0	Carbon Disulfide	20	26.8	134* [a]	26.5	133	1	64-133/30
56-23-5	Carbon Tetrachloride	20	19.4	97	19.5	98	1	69-132/30
108-90-7	Chlorobenzene	20	19.5	98	19.3	97	1	85-120/30
75-00-3	Chloroethane	20	19.4	97	19.3	97	1	33-170/30
67-66-3	Chloroform	20	19.4	97	19.4	97	0	80-122/30
124-48-1	Dibromochloromethane	20	22.0	110	21.8	109	1	73-125/30
96-12-8	1,2-Dibromo-3-chloropropane	20	18.2	91	17.2	86	6	67-131/30
541-73-1	m-Dichlorobenzene	20	20.5	103	19.7	99	4	84-121/30
95-50-1	o-Dichlorobenzene	20	19.6	98	19.0	95	3	83-120/30
106-46-7	p-Dichlorobenzene	20	20.1	101	19.3	97	4	83-122/30
75-34-3	1,1-Dichloroethane	20	17.1	86	17.1	86	0	78-124/30
107-06-2	1,2-Dichloroethane	20	19.9	100	19.4	97	3	74-127/30
75-35-4	1,1-Dichloroethylene	20	24.5	123	24.2	121	1	70-134/30
156-59-2	cis-1,2-Dichloroethylene	20	20.3	102	20.4	102	0	78-122/30
156-60-5	trans-1,2-Dichloroethylene	20	21.4	107	21.2	106	1	75-127/30
540-59-0	1,2-Dichloroethene (total)	40	41.7	104	41.5	104	0	78-123/30
78-87-5	1,2-Dichloropropane	20	19.5	98	19.4	97	1	82-120/30
10061-01-5	cis-1,3-Dichloropropene	20	19.8	99	19.6	98	1	79-122/30
10061-02-6	trans-1,3-Dichloropropene	20	19.3	97	19.2	96	1	78-124/30
542-75-6	1,3-Dichloropropene (total)	40	39.1	98	38.8	97	1	50-150/30 [b]
100-41-4	Ethylbenzene	20	20.3	102	20.3	102	0	84-117/30
67-72-1	Hexachloroethane	20	17.4	87	16.5	83	5	53-141/30
78-83-1	Isobutyl Alcohol	200	162	81	155	78	4	20-175/30
74-83-9	Methyl Bromide	20	21.2	106	20.4	102	4	37-198/30
74-87-3	Methyl Chloride	20	14.9	75	15.7	79	5	50-136/30
75-09-2	Methylene Chloride	20	20.7	104	20.5	103	1	71-130/30
78-93-3	Methyl Ethyl Ketone	50	47.9	96	46.1	92	4	59-149/30
108-10-1	4-Methyl-2-pentanone	50	51.6	103	50.4	101	2	74-131/30
1634-04-4	Methyl Tert Butyl Ether	20	18.9	95	18.7	94	1	70-126/30
100-42-5	Styrene	20	20.2	101	19.9	100	1	79-128/30
630-20-6	1,1,1,2-Tetrachloroethane	20	21.2	106	21.6	108	2	84-120/30
79-34-5	1,1,2,2-Tetrachloroethane	20	20.3	102	20.0	100	1	77-126/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I1779-BS1	2I038274.D	1	09/10/18	NN	n/a	n/a	V2I1779
V2I1779-BSD1	2I038276.D	1	09/10/18	NN	n/a	n/a	V2I1779

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

LA47398-10, LA47398-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	20	21.2	106	20.9	105	1	75-133/30
108-88-3	Toluene	20	19.8	99	19.7	99	1	80-121/30
71-55-6	1,1,1-Trichloroethane	20	20.1	101	19.7	99	2	74-126/30
79-00-5	1,1,2-Trichloroethane	20	20.3	102	20.3	102	0	80-123/30
79-01-6	Trichloroethylene	20	22.1	111	21.5	108	3	62-125/30
75-69-4	Trichlorofluoromethane	20	20.9	105	20.8	104	0	62-148/30
75-01-4	Vinyl Chloride	20	18.0	90	17.9	90	1	67-130/30
	m,p-Xylene	40	41.1	103	40.3	101	2	82-121/30
95-47-6	o-Xylene	20	20.0	100	19.9	100	1	84-119/30
1330-20-7	Xylene (total)	60	61.1	102	60.3	101	1	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	98%	99%	83-115%
460-00-4	4-Bromofluorobenzene	101%	102%	89-111%

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

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1Q2136-BS1	1Q0441991.D	1	09/10/18	NN	n/a	n/a	V1Q2136
V1Q2136-BSD1	1Q0441992.D	1	09/10/18	NN	n/a	n/a	V1Q2136

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

LA47398-11, LA47398-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	52.1	104	50.3	101	4	38-178/30
71-43-2	Benzene	20	20.6	103	20.8	104	1	82-119/30
75-27-4	Bromodichloromethane	20	21.3	107	21.6	108	1	79-120/30
75-25-2	Bromoform	20	21.6	108	21.3	107	1	68-128/30
75-15-0	Carbon Disulfide	20	22.8	114	23.9	120	5	64-133/30
56-23-5	Carbon Tetrachloride	20	21.3	107	22.0	110	3	69-132/30
108-90-7	Chlorobenzene	20	21.2	106	21.7	109	2	85-120/30
75-00-3	Chloroethane	20	19.1	96	20.1	101	5	33-170/30
67-66-3	Chloroform	20	21.2	106	21.8	109	3	80-122/30
124-48-1	Dibromochloromethane	20	21.3	107	22.0	110	3	73-125/30
96-12-8	1,2-Dibromo-3-chloropropane	20	18.7	94	21.6	108	14	67-131/30
541-73-1	m-Dichlorobenzene	20	21.0	105	21.1	106	0	84-121/30
95-50-1	o-Dichlorobenzene	20	23.0	115	22.9	115	0	83-120/30
106-46-7	p-Dichlorobenzene	20	21.8	109	22.8	114	4	83-122/30
75-34-3	1,1-Dichloroethane	20	20.5	103	21.5	108	5	78-124/30
107-06-2	1,2-Dichloroethane	20	21.3	107	22.2	111	4	74-127/30
75-35-4	1,1-Dichloroethylene	20	20.7	104	21.1	106	2	70-134/30
156-59-2	cis-1,2-Dichloroethylene	20	20.8	104	20.7	104	0	78-122/30
156-60-5	trans-1,2-Dichloroethylene	20	24.0	120	24.0	120	0	75-127/30
540-59-0	1,2-Dichloroethene (total)	40	44.8	112	44.8	112	0	78-123/30
78-87-5	1,2-Dichloropropane	20	21.1	106	22.0	110	4	82-120/30
10061-01-5	cis-1,3-Dichloropropene	20	20.6	103	21.4	107	4	79-122/30
10061-02-6	trans-1,3-Dichloropropene	20	20.8	104	20.8	104	0	78-124/30
542-75-6	1,3-Dichloropropene (total)	40	41.4	104	42.3	106	2	50-150/30 [a]
100-41-4	Ethylbenzene	20	21.3	107	21.9	110	3	84-117/30
67-72-1	Hexachloroethane	20	21.9	110	22.1	111	1	53-141/30
78-83-1	Isobutyl Alcohol	200	138	69	136	68	1	20-175/30
74-83-9	Methyl Bromide	20	21.5	108	22.2	111	3	37-198/30
74-87-3	Methyl Chloride	20	18.0	90	17.9	90	1	50-136/30
75-09-2	Methylene Chloride	20	22.2	111	23.2	116	4	71-130/30
78-93-3	Methyl Ethyl Ketone	50	50.8	102	51.0	102	0	59-149/30
108-10-1	4-Methyl-2-pentanone	50	44.6	89	46.1	92	3	74-131/30
1634-04-4	Methyl Tert Butyl Ether	20	20.3	102	20.5	103	1	70-126/30
100-42-5	Styrene	20	23.5	118	24.1	121	3	79-128/30
630-20-6	1,1,1,2-Tetrachloroethane	20	21.0	105	21.9	110	4	84-120/30
79-34-5	1,1,2,2-Tetrachloroethane	20	20.9	105	21.5	108	3	77-126/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1Q2136-BS1	1Q0441991.D	1	09/10/18	NN	n/a	n/a	V1Q2136
V1Q2136-BSD1	1Q0441992.D	1	09/10/18	NN	n/a	n/a	V1Q2136

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

LA47398-11, LA47398-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	20	21.8	109	20.4	102	7	75-133/30
108-88-3	Toluene	20	21.8	109	21.8	109	0	80-121/30
71-55-6	1,1,1-Trichloroethane	20	21.5	108	21.9	110	2	74-126/30
79-00-5	1,1,2-Trichloroethane	20	21.3	107	21.0	105	1	80-123/30
79-01-6	Trichloroethylene	20	21.7	109	22.1	111	2	62-125/30
75-69-4	Trichlorofluoromethane	20	20.3	102	20.3	102	0	62-148/30
75-01-4	Vinyl Chloride	20	19.1	96	19.3	97	1	67-130/30
	m,p-Xylene	40	44.1	110	45.0	113	2	82-121/30
95-47-6	o-Xylene	20	22.0	110	22.2	111	1	84-119/30
1330-20-7	Xylene (total)	60	66.1	110	67.2	112	2	81-122/30

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

(a) Advisory control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2I1781-BS1	2I038328.D	1	09/11/18	NN	n/a	n/a	V2I1781
V2I1781-BSD1	2I038330.D	1	09/11/18	NN	n/a	n/a	V2I1781

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

LA47398-1R, LA47398-3R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	19.5	98	19.7	99	1	82-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	90%	91%	84-124%
2037-26-5	Toluene-D8	98%	97%	83-115%
460-00-4	4-Bromofluorobenzene	98%	99%	89-111%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1456-BS1	2J0054605.D	1	09/11/18	NN	n/a	n/a	V2J1456
V2J1456-BSD1	2J0054607.D	1	09/11/18	NN	n/a	n/a	V2J1456

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

LA47398-17, LA47398-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	45.9	92	43.8	88	5	38-178/30
71-43-2	Benzene	20	20.3	102	19.7	99	3	82-119/30
75-27-4	Bromodichloromethane	20	19.9	100	19.1	96	4	79-120/30
75-25-2	Bromoform	20	17.8	89	17.7	89	1	68-128/30
75-15-0	Carbon Disulfide	20	19.5	98	18.7	94	4	64-133/30
56-23-5	Carbon Tetrachloride	20	20.0	100	19.5	98	3	69-132/30
108-90-7	Chlorobenzene	20	19.6	98	19.2	96	2	85-120/30
75-00-3	Chloroethane	20	18.2	91	18.4	92	1	33-170/30
67-66-3	Chloroform	20	19.7	99	18.6	93	6	80-122/30
124-48-1	Dibromochloromethane	20	19.5	98	17.9	90	9	73-125/30
96-12-8	1,2-Dibromo-3-chloropropane	20	18.2	91	17.3	87	5	67-131/30
541-73-1	m-Dichlorobenzene	20	20.1	101	19.5	98	3	84-121/30
95-50-1	o-Dichlorobenzene	20	19.4	97	20.1	101	4	83-120/30
106-46-7	p-Dichlorobenzene	20	19.2	96	19.4	97	1	83-122/30
75-34-3	1,1-Dichloroethane	20	19.0	95	18.7	94	2	78-124/30
107-06-2	1,2-Dichloroethane	20	18.9	95	19.0	95	1	74-127/30
75-35-4	1,1-Dichloroethylene	20	20.8	104	19.4	97	7	70-134/30
156-59-2	cis-1,2-Dichloroethylene	20	20.7	104	19.6	98	5	78-122/30
156-60-5	trans-1,2-Dichloroethylene	20	19.4	97	18.9	95	3	75-127/30
540-59-0	1,2-Dichloroethene (total)	40	40.1	100	38.5	96	4	78-123/30
78-87-5	1,2-Dichloropropane	20	19.0	95	19.3	97	2	82-120/30
10061-01-5	cis-1,3-Dichloropropene	20	20.4	102	19.8	99	3	79-122/30
10061-02-6	trans-1,3-Dichloropropene	20	19.2	96	18.9	95	2	78-124/30
542-75-6	1,3-Dichloropropene (total)	40	39.6	99	38.7	97	2	50-150/30 [a]
100-41-4	Ethylbenzene	20	20.9	105	20.2	101	3	84-117/30
67-72-1	Hexachloroethane	20	18.6	93	18.6	93	0	53-141/30
78-83-1	Isobutyl Alcohol	200	197	99	182	91	8	20-175/30
74-83-9	Methyl Bromide	20	22.6	113	22.3	112	1	37-198/30
74-87-3	Methyl Chloride	20	19.9	100	19.1	96	4	50-136/30
75-09-2	Methylene Chloride	20	19.8	99	19.8	99	0	71-130/30
78-93-3	Methyl Ethyl Ketone	50	47.8	96	47.4	95	1	59-149/30
108-10-1	4-Methyl-2-pentanone	50	49.0	98	46.0	92	6	74-131/30
1634-04-4	Methyl Tert Butyl Ether	20	20.6	103	20.4	102	1	70-126/30
100-42-5	Styrene	20	21.4	107	20.6	103	4	79-128/30
630-20-6	1,1,1,2-Tetrachloroethane	20	20.4	102	20.2	101	1	84-120/30
79-34-5	1,1,2,2-Tetrachloroethane	20	19.1	96	19.0	95	1	77-126/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1456-BS1	2J0054605.D	1	09/11/18	NN	n/a	n/a	V2J1456
V2J1456-BSD1	2J0054607.D	1	09/11/18	NN	n/a	n/a	V2J1456

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

LA47398-17, LA47398-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	20	20.0	100	19.0	95	5	75-133/30
108-88-3	Toluene	20	20.8	104	19.6	98	6	80-121/30
71-55-6	1,1,1-Trichloroethane	20	20.7	104	20.0	100	3	74-126/30
79-00-5	1,1,2-Trichloroethane	20	20.0	100	19.9	100	1	80-123/30
79-01-6	Trichloroethylene	20	20.8	104	20.8	104	0	62-125/30
75-69-4	Trichlorofluoromethane	20	20.5	103	19.6	98	4	62-148/30
75-01-4	Vinyl Chloride	20	19.8	99	19.6	98	1	67-130/30
	m,p-Xylene	40	42.9	107	41.5	104	3	82-121/30
95-47-6	o-Xylene	20	21.3	107	20.4	102	4	84-119/30
1330-20-7	Xylene (total)	60	64.1	107	62.0	103	3	81-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	94%	96%	84-124%
2037-26-5	Toluene-D8	98%	99%	83-115%
460-00-4	4-Bromofluorobenzene	103%	100%	89-111%

(a) Advisory control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1I1787-BS1	1I038483.D	1	09/12/18	NN	n/a	n/a	V1I1787
V1I1787-BSD1	1I038485.D	1	09/12/18	NN	n/a	n/a	V1I1787

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	48.2	96	49.0	98	2	38-178/30
71-43-2	Benzene	20	19.9	100	19.0	95	5	82-119/30
75-27-4	Bromodichloromethane	20	20.0	100	19.2	96	4	79-120/30
75-25-2	Bromoform	20	17.2	86	17.8	89	3	68-128/30
75-15-0	Carbon Disulfide	20	21.2	106	20.3	102	4	64-133/30
56-23-5	Carbon Tetrachloride	20	18.9	95	18.3	92	3	69-132/30
108-90-7	Chlorobenzene	20	20.3	102	20.1	101	1	85-120/30
75-00-3	Chloroethane	20	22.6	113	21.6	108	5	33-170/30
67-66-3	Chloroform	20	19.4	97	18.7	94	4	80-122/30
124-48-1	Dibromochloromethane	20	18.1	91	18.4	92	2	73-125/30
96-12-8	1,2-Dibromo-3-chloropropane	20	17.1	86	17.3	87	1	67-131/30
541-73-1	m-Dichlorobenzene	20	20.1	101	19.8	99	2	84-121/30
95-50-1	o-Dichlorobenzene	20	20.0	100	19.7	99	2	83-120/30
106-46-7	p-Dichlorobenzene	20	19.1	96	19.0	95	1	83-122/30
75-34-3	1,1-Dichloroethane	20	17.8	89	19.1	96	7	78-124/30
107-06-2	1,2-Dichloroethane	20	19.1	96	18.7	94	2	74-127/30
75-35-4	1,1-Dichloroethylene	20	19.3	97	18.9	95	2	70-134/30
156-59-2	cis-1,2-Dichloroethylene	20	19.7	99	19.2	96	3	78-122/30
156-60-5	trans-1,2-Dichloroethylene	20	19.9	100	18.8	94	6	75-127/30
540-59-0	1,2-Dichloroethene (total)	40	39.7	99	38.1	95	4	78-123/30
78-87-5	1,2-Dichloropropane	20	20.2	101	19.9	100	1	82-120/30
10061-01-5	cis-1,3-Dichloropropene	20	20.3	102	19.3	97	5	79-122/30
10061-02-6	trans-1,3-Dichloropropene	20	19.7	99	19.5	98	1	78-124/30
542-75-6	1,3-Dichloropropene (total)	40	40.0	100	38.8	97	3	50-150/30 [a]
100-41-4	Ethylbenzene	20	19.3	97	19.3	97	0	84-117/30
67-72-1	Hexachloroethane	20	20.4	102	19.6	98	4	53-141/30
78-83-1	Isobutyl Alcohol	200	178	89	180	90	1	20-175/30
74-83-9	Methyl Bromide	20	22.5	113	20.7	104	8	37-198/30
74-87-3	Methyl Chloride	20	20.7	104	20.1	101	3	50-136/30
75-09-2	Methylene Chloride	20	21.1	106	20.6	103	2	71-130/30
78-93-3	Methyl Ethyl Ketone	50	46.8	94	46.3	93	1	59-149/30
108-10-1	4-Methyl-2-pentanone	50	48.3	97	48.5	97	0	74-131/30
1634-04-4	Methyl Tert Butyl Ether	20	18.7	94	18.4	92	2	70-126/30
100-42-5	Styrene	20	21.5	108	21.2	106	1	79-128/30
630-20-6	1,1,1,2-Tetrachloroethane	20	19.7	99	19.5	98	1	84-120/30
79-34-5	1,1,2,2-Tetrachloroethane	20	18.7	94	18.5	93	1	77-126/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1I1787-BS1	1I038483.D	1	09/12/18	NN	n/a	n/a	V1I1787
V1I1787-BSD1	1I038485.D	1	09/12/18	NN	n/a	n/a	V1I1787

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	20	19.4	97	18.4	92	5	75-133/30
108-88-3	Toluene	20	19.4	97	18.8	94	3	80-121/30
71-55-6	1,1,1-Trichloroethane	20	19.5	98	19.0	95	3	74-126/30
79-00-5	1,1,2-Trichloroethane	20	18.3	92	18.9	95	3	80-123/30
79-01-6	Trichloroethylene	20	20.2	101	19.8	99	2	62-125/30
75-69-4	Trichlorofluoromethane	20	19.0	95	18.3	92	4	62-148/30
75-01-4	Vinyl Chloride	20	20.9	105	20.0	100	4	67-130/30
	m,p-Xylene	40	39.2	98	38.5	96	2	82-121/30
95-47-6	o-Xylene	20	19.7	99	19.5	98	1	84-119/30
1330-20-7	Xylene (total)	60	58.9	98	58.0	97	2	81-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	92%	92%	84-124%
2037-26-5	Toluene-D8	100%	100%	83-115%
460-00-4	4-Bromofluorobenzene	96%	98%	89-111%

(a) Advisory control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47375-30MS	2I038318.D	10	09/10/18	NN	n/a	n/a	V2I1779
LA47375-30MSD	2I038320.D	10	09/10/18	NN	n/a	n/a	V2I1779
LA47375-30	2I038312.D	10	09/10/18	NN	n/a	n/a	V2I1779

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

LA47398-10, LA47398-15

CAS No.	Compound	LA47375-30 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	118		500	431	63	500	423	61	2	39-164/27
71-43-2	Benzene	110		200	296	93	200	298	94	1	31-161/15
75-27-4	Bromodichloromethane	ND		200	172	86	200	172	86	0	64-122/36
75-25-2	Bromoform	ND		200	140	70	200	140	70	0	43-125/37
75-15-0	Carbon Disulfide	ND		200	219	110	200	225	113	3	38-138/36
56-23-5	Carbon Tetrachloride	ND		200	164	82	200	172	86	5	53-133/36
108-90-7	Chlorobenzene	9.7		200	181	86	200	186	88	3	74-122/34
75-00-3	Chloroethane	ND		200	182	91	200	188	94	3	14-181/43
67-66-3	Chloroform	ND		200	175	88	200	174	87	1	65-130/24
124-48-1	Dibromochloromethane	ND		200	186	93	200	190	95	2	57-121/36
96-12-8	1,2-Dibromo-3-chloropropane	ND		200	139	70	200	151	76	8	46-135/25
541-73-1	m-Dichlorobenzene	ND		200	185	93	200	193	97	4	70-120/35
95-50-1	o-Dichlorobenzene	ND		200	180	90	200	185	93	3	72-120/35
106-46-7	p-Dichlorobenzene	ND		200	184	92	200	186	93	1	68-120/35
75-34-3	1,1-Dichloroethane	ND		200	179	90	200	178	89	1	56-138/32
107-06-2	1,2-Dichloroethane	ND		200	184	92	200	182	91	1	51-141/39
75-35-4	1,1-Dichloroethylene	ND		200	212	106	200	215	108	1	48-139/37
156-59-2	cis-1,2-Dichloroethylene	ND		200	185	93	200	181	91	2	56-133/15
156-60-5	trans-1,2-Dichloroethylene	ND		200	193	97	200	192	96	1	59-128/37
540-59-0	1,2-Dichloroethene (total)	ND		400	379	95	400	372	93	2	54-134/30
78-87-5	1,2-Dichloropropane	ND		200	175	88	200	175	88	0	68-124/32
10061-01-5	cis-1,3-Dichloropropene	ND		200	163	82	200	163	82	0	62-120/35
10061-02-6	trans-1,3-Dichloropropene	ND		200	165	83	200	168	84	2	64-119/36
542-75-6	1,3-Dichloropropene (total)	ND		400	328	82	400	332	83	1	50-150/30 [a]
100-41-4	Ethylbenzene	369		200	574	103	200	580	106	1	47-146/30
67-72-1	Hexachloroethane	ND		200	134	67	200	143	72	6	32-128/39
78-83-1	Isobutyl Alcohol	ND		2000	1050	53	2000	1040	52	1	33-142/54
74-83-9	Methyl Bromide	ND		200	180	90	200	194	97	7	1-150/64
74-87-3	Methyl Chloride	ND		200	162	81	200	167	84	3	16-146/29
75-09-2	Methylene Chloride	4.5		200	183	89	200	182	89	1	55-134/36
78-93-3	Methyl Ethyl Ketone	ND		500	363	73	500	366	73	1	54-142/39
108-10-1	4-Methyl-2-pentanone	ND		500	385	77	500	391	78	2	60-140/40
1634-04-4	Methyl Tert Butyl Ether	ND		200	157	79	200	158	79	1	52-146/32
100-42-5	Styrene	ND		200	184	92	200	185	93	1	67-128/35
630-20-6	1,1,1,2-Tetrachloroethane	ND		200	193	97	200	196	98	2	67-121/35
79-34-5	1,1,2,2-Tetrachloroethane	ND		200	176	88	200	181	91	3	64-133/38

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47375-30MS	2I038318.D	10	09/10/18	NN	n/a	n/a	V2I1779
LA47375-30MSD	2I038320.D	10	09/10/18	NN	n/a	n/a	V2I1779
LA47375-30	2I038312.D	10	09/10/18	NN	n/a	n/a	V2I1779

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

LA47398-10, LA47398-15

CAS No.	Compound	LA47375-30 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		200	196	98	200	202	101	3	58-135/37
108-88-3	Toluene	1170		200	1360	95	200	1370	100	1	36-155/17
71-55-6	1,1,1-Trichloroethane	ND		200	175	88	200	181	91	3	63-128/36
79-00-5	1,1,2-Trichloroethane	ND		200	183	92	200	185	93	1	61-138/17
79-01-6	Trichloroethylene	ND		200	193	97	200	194	97	1	57-131/36
75-69-4	Trichlorofluoromethane	ND		200	197	99	200	198	99	1	31-156/36
75-01-4	Vinyl Chloride	ND		200	171	86	200	172	86	1	22-155/49
	m,p-Xylene	1370		400	1750	95	400	1770	100	1	35-159/31
95-47-6	o-Xylene	500		200	706	103	200	708	104	0	50-144/35
1330-20-7	Xylene (total)	1870		600	2460	98	600	2480	102	1	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA47375-30	Limits
17060-07-0	1,2-Dichloroethane-D4	93%	93%	95%	84-124%
2037-26-5	Toluene-D8	97%	98%	97%	83-115%
460-00-4	4-Bromofluorobenzene	100%	99%	99%	89-111%

(a) Advisory control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47416-4MS	1Q0442015.D	2	09/11/18	NN	n/a	n/a	V1Q2136
LA47416-4MSD	1Q0442016.D	2	09/11/18	NN	n/a	n/a	V1Q2136
LA47416-4	1Q0442004.D	1	09/11/18	NN	n/a	n/a	V1Q2136

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

LA47398-11, LA47398-16

CAS No.	Compound	LA47416-4 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	2.0		100	100	98	100	97.4	95	3	39-164/27
71-43-2	Benzene	ND		40	41.3	103	40	40.4	101	2	31-161/15
75-27-4	Bromodichloromethane	ND		40	41.5	104	40	41.6	104	0	64-122/36
75-25-2	Bromoform	ND		40	40.5	101	40	38.7	97	5	43-125/37
75-15-0	Carbon Disulfide	ND		40	46.3	116	40	45.2	113	2	38-138/36
56-23-5	Carbon Tetrachloride	ND		40	42.9	107	40	42.0	105	2	53-133/36
108-90-7	Chlorobenzene	ND		40	40.7	102	40	39.5	99	3	74-122/34
75-00-3	Chloroethane	ND		40	43.0	108	40	40.1	100	7	14-181/43
67-66-3	Chloroform	0.34		40	42.1	104	40	41.2	102	2	65-130/24
124-48-1	Dibromochloromethane	ND		40	41.9	105	40	40.0	100	5	57-121/36
96-12-8	1,2-Dibromo-3-chloropropane	ND		40	34.8	87	40	35.1	88	1	46-135/25
541-73-1	m-Dichlorobenzene	ND		40	37.2	93	40	38.4	96	3	70-120/35
95-50-1	o-Dichlorobenzene	ND		40	38.7	97	40	41.7	104	7	72-120/35
106-46-7	p-Dichlorobenzene	ND		40	38.4	96	40	40.8	102	6	68-120/35
75-34-3	1,1-Dichloroethane	ND		40	41.5	104	40	40.9	102	1	56-138/32
107-06-2	1,2-Dichloroethane	ND		40	43.4	109	40	41.5	104	4	51-141/39
75-35-4	1,1-Dichloroethylene	ND		40	41.0	103	40	41.3	103	1	48-139/37
156-59-2	cis-1,2-Dichloroethylene	5.3		40	47.2	105	40	44.9	99	5	56-133/15
156-60-5	trans-1,2-Dichloroethylene	0.29		40	48.6	121	40	46.8	116	4	59-128/37
540-59-0	1,2-Dichloroethene (total)	5.6		80	95.9	113	80	91.7	108	4	54-134/30
78-87-5	1,2-Dichloropropane	ND		40	42.1	105	40	41.2	103	2	68-124/32
10061-01-5	cis-1,3-Dichloropropene	ND		40	40.7	102	40	39.6	99	3	62-120/35
10061-02-6	trans-1,3-Dichloropropene	ND		40	37.6	94	40	37.5	94	0	64-119/36
542-75-6	1,3-Dichloropropene (total)	ND		80	78.4	98	80	77.1	96	2	50-150/30 [a]
100-41-4	Ethylbenzene	ND		40	40.9	102	40	39.8	100	3	47-146/30
67-72-1	Hexachloroethane	ND		40	41.7	104	40	43.2	108	4	32-128/39
78-83-1	Isobutyl Alcohol	ND		400	294	74	400	309	77	5	33-142/54
74-83-9	Methyl Bromide	ND		40	37.5	94	40	38.9	97	4	1-150/64
74-87-3	Methyl Chloride	ND		40	43.4	109	40	40.1	100	8	16-146/29
75-09-2	Methylene Chloride	ND		40	45.6	114	40	44.3	111	3	55-134/36
78-93-3	Methyl Ethyl Ketone	ND		100	97.6	98	100	93.0	93	5	54-142/39
108-10-1	4-Methyl-2-pentanone	ND		100	86.5	87	100	85.1	85	2	60-140/40
1634-04-4	Methyl Tert Butyl Ether	ND		40	39.0	98	40	38.0	95	3	52-146/32
100-42-5	Styrene	ND		40	36.7	92	40	41.4	104	12	67-128/35
630-20-6	1,1,1,2-Tetrachloroethane	ND		40	41.0	103	40	40.8	102	0	67-121/35
79-34-5	1,1,2,2-Tetrachloroethane	ND		40	37.7	94	40	38.3	96	2	64-133/38

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47416-4MS	1Q0442015.D	2	09/11/18	NN	n/a	n/a	V1Q2136
LA47416-4MSD	1Q0442016.D	2	09/11/18	NN	n/a	n/a	V1Q2136
LA47416-4	1Q0442004.D	1	09/11/18	NN	n/a	n/a	V1Q2136

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

LA47398-11, LA47398-16

CAS No.	Compound	LA47416-4 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	643	E	40	600	-108* [b]	40	597	-115* [b]	1	58-135/37
108-88-3	Toluene	ND		40	42.3	106	40	41.5	104	2	36-155/17
71-55-6	1,1,1-Trichloroethane	ND		40	44.2	111	40	42.3	106	4	63-128/36
79-00-5	1,1,2-Trichloroethane	ND		40	37.7	94	40	37.3	93	1	61-138/17
79-01-6	Trichloroethylene	6.8		40	49.9	108	40	49.4	107	1	57-131/36
75-69-4	Trichlorofluoromethane	ND		40	42.3	106	40	40.4	101	5	31-156/36
75-01-4	Vinyl Chloride	ND		40	41.2	103	40	39.2	98	5	22-155/49
	m,p-Xylene	ND		80	81.9	102	80	82.1	103	0	35-159/31
95-47-6	o-Xylene	ND		40	40.9	102	40	40.7	102	0	50-144/35
1330-20-7	Xylene (total)	ND		120	123	103	120	123	103	0	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA47416-4	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	103%	100%	84-124%
2037-26-5	Toluene-D8	98%	101%	100%	83-115%
460-00-4	4-Bromofluorobenzene	102%	102%	95%	89-111%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47398-9MS	2I038364.D	5	09/11/18	NN	n/a	n/a	V2I1781
LA47398-9MSD	2I038366.D	5	09/11/18	NN	n/a	n/a	V2I1781
LA47398-9 [a]	2I038352.D	1	09/11/18	NN	n/a	n/a	V2I1781

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

LA47398-1R, LA47398-3R

CAS No.	Compound	LA47398-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		100	92.0	92	100	88.9	89	3	31-161/15

CAS No.	Surrogate Recoveries	MS	MSD	LA47398-9	Limits
17060-07-0	1,2-Dichloroethane-D4	93%	94%	93%	84-124%
2037-26-5	Toluene-D8	97%	97%	97%	83-115%
460-00-4	4-Bromofluorobenzene	99%	99%	96%	89-111%

(a) Sample used for QC purposes only.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47472-18MS	2J0054653.D	5	09/12/18	NN	n/a	n/a	V2J1456
LA47472-18MSD	2J0054655.D	5	09/12/18	NN	n/a	n/a	V2J1456
LA47472-18	2J0054651.D	1	09/12/18	NN	n/a	n/a	V2J1456

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

LA47398-17, LA47398-18

CAS No.	Compound	LA47472-18 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	164	66	250	161	64	2	39-164/27
71-43-2	Benzene	6.3		100	109	103	100	107	101	2	31-161/15
75-27-4	Bromodichloromethane	ND		100	106	106	100	100	100	6	64-122/36
75-25-2	Bromoform	ND		100	95.6	96	100	98.2	98	3	43-125/37
75-15-0	Carbon Disulfide	ND		100	91.5	92	100	94.8	95	4	38-138/36
56-23-5	Carbon Tetrachloride	ND		100	95.2	95	100	98.5	99	3	53-133/36
108-90-7	Chlorobenzene	ND		100	103	103	100	104	104	1	74-122/34
75-00-3	Chloroethane	ND		100	64.5	65	100	99.7	100	43	14-181/43
67-66-3	Chloroform	ND		100	94.7	95	100	96.0	96	1	65-130/24
124-48-1	Dibromochloromethane	ND		100	96.0	96	100	99.6	100	4	57-121/36
96-12-8	1,2-Dibromo-3-chloropropane	ND		100	105	105	100	124	124	17	46-135/25
541-73-1	m-Dichlorobenzene	ND		100	102	102	100	109	109	7	70-120/35
95-50-1	o-Dichlorobenzene	ND		100	104	104	100	110	110	6	72-120/35
106-46-7	p-Dichlorobenzene	ND		100	101	101	100	104	104	3	68-120/35
75-34-3	1,1-Dichloroethane	ND		100	97.2	97	100	96.3	96	1	56-138/32
107-06-2	1,2-Dichloroethane	ND		100	98.4	98	100	99.8	100	1	51-141/39
75-35-4	1,1-Dichloroethylene	ND		100	96.1	96	100	101	101	5	48-139/37
156-59-2	cis-1,2-Dichloroethylene	ND		100	99.8	100	100	98.4	98	1	56-133/15
156-60-5	trans-1,2-Dichloroethylene	ND		100	92.6	93	100	97.7	98	5	59-128/37
540-59-0	1,2-Dichloroethene (total)	ND		200	192	96	200	196	98	2	54-134/30
78-87-5	1,2-Dichloropropane	ND		100	101	101	100	100	100	1	68-124/32
10061-01-5	cis-1,3-Dichloropropene	ND		100	102	102	100	99.0	99	3	62-120/35
10061-02-6	trans-1,3-Dichloropropene	ND		100	97.0	97	100	99.0	99	2	64-119/36
542-75-6	1,3-Dichloropropene (total)	ND		200	199	100	200	198	99	1	50-150/30 [a]
100-41-4	Ethylbenzene	56.4		100	157	101	100	159	103	1	47-146/30
67-72-1	Hexachloroethane	ND		100	90.9	91	100	94.0	94	3	32-128/39
78-83-1	Isobutyl Alcohol	ND		1000	1150	115	1000	1260	126	9	33-142/54
74-83-9	Methyl Bromide	ND		100	62.3	62	100	90.6	91	37	1-150/64
74-87-3	Methyl Chloride	ND		100	92.4	92	100	90.2	90	2	16-146/29
75-09-2	Methylene Chloride	ND		100	96.3	96	100	104	104	8	55-134/36
78-93-3	Methyl Ethyl Ketone	ND		250	255	102	250	268	107	5	54-142/39
108-10-1	4-Methyl-2-pentanone	ND		250	291	116	250	287	115	1	60-140/40
1634-04-4	Methyl Tert Butyl Ether	ND		100	102	102	100	107	107	5	52-146/32
100-42-5	Styrene	ND		100	111	111	100	112	112	1	67-128/35
630-20-6	1,1,1,2-Tetrachloroethane	ND		100	107	107	100	109	109	2	67-121/35
79-34-5	1,1,2,2-Tetrachloroethane	ND		100	116	116	100	123	123	6	64-133/38

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47472-18MS	2J0054653.D	5	09/12/18	NN	n/a	n/a	V2J1456
LA47472-18MSD	2J0054655.D	5	09/12/18	NN	n/a	n/a	V2J1456
LA47472-18	2J0054651.D	1	09/12/18	NN	n/a	n/a	V2J1456

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

LA47398-17, LA47398-18

CAS No.	Compound	LA47472-18 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	98.7	99	100	98.4	98	0	58-135/37
108-88-3	Toluene	4.7		100	107	102	100	106	101	1	36-155/17
71-55-6	1,1,1-Trichloroethane	ND		100	98.6	99	100	104	104	5	63-128/36
79-00-5	1,1,2-Trichloroethane	ND		100	104	104	100	109	109	5	61-138/17
79-01-6	Trichloroethylene	ND		100	98.2	98	100	94.6	95	4	57-131/36
75-69-4	Trichlorofluoromethane	ND		100	95.9	96	100	98.5	99	3	31-156/36
75-01-4	Vinyl Chloride	ND		100	97.0	97	100	94.1	94	3	22-155/49
	m,p-Xylene	105		200	322	109	200	319	107	1	35-159/31
95-47-6	o-Xylene	3.7		100	111	107	100	115	111	4	50-144/35
1330-20-7	Xylene (total)	109		300	434	108	300	434	108	0	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA47472-18	Limits
17060-07-0	1,2-Dichloroethane-D4	92%	98%	98%	84-124%
2037-26-5	Toluene-D8	100%	97%	100%	83-115%
460-00-4	4-Bromofluorobenzene	99%	100%	99%	89-111%

(a) Advisory control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47472-4MS	1I038525.D	10	09/13/18	NN	n/a	n/a	V1I1787
LA47472-4MSD	1I038527.D	10	09/13/18	NN	n/a	n/a	V1I1787
LA47472-4	1I038521.D	5	09/12/18	NN	n/a	n/a	V1I1787

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	LA47472-4 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	14.9		500	339	65	500	353	68	4	39-164/27
71-43-2	Benzene	199		200	394	98	200	401	101	2	31-161/15
75-27-4	Bromodichloromethane	ND		200	190	95	200	188	94	1	64-122/36
75-25-2	Bromoform	ND		200	159	80	200	160	80	1	43-125/37
75-15-0	Carbon Disulfide	ND		200	205	103	200	204	102	0	38-138/36
56-23-5	Carbon Tetrachloride	ND		200	187	94	200	185	93	1	53-133/36
108-90-7	Chlorobenzene	ND		200	203	102	200	202	101	0	74-122/34
75-00-3	Chloroethane	ND		200	303	152	200	222	111	31	14-181/43
67-66-3	Chloroform	1.5		200	184	91	200	185	92	1	65-130/24
124-48-1	Dibromochloromethane	ND		200	175	88	200	179	90	2	57-121/36
96-12-8	1,2-Dibromo-3-chloropropane	ND		200	162	81	200	166	83	2	46-135/25
541-73-1	m-Dichlorobenzene	ND		200	191	96	200	189	95	1	70-120/35
95-50-1	o-Dichlorobenzene	ND		200	187	94	200	185	93	1	72-120/35
106-46-7	p-Dichlorobenzene	ND		200	184	92	200	179	90	3	68-120/35
75-34-3	1,1-Dichloroethane	ND		200	198	99	200	193	97	3	56-138/32
107-06-2	1,2-Dichloroethane	ND		200	191	96	200	192	96	1	51-141/39
75-35-4	1,1-Dichloroethylene	ND		200	194	97	200	193	97	1	48-139/37
156-59-2	cis-1,2-Dichloroethylene	ND		200	197	99	200	193	97	2	56-133/15
156-60-5	trans-1,2-Dichloroethylene	ND		200	195	98	200	197	99	1	59-128/37
540-59-0	1,2-Dichloroethene (total)	ND		400	391	98	400	390	98	0	54-134/30
78-87-5	1,2-Dichloropropane	1.8		200	200	99	200	203	101	1	68-124/32
10061-01-5	cis-1,3-Dichloropropene	ND		200	184	92	200	185	93	1	62-120/35
10061-02-6	trans-1,3-Dichloropropene	ND		200	185	93	200	183	92	1	64-119/36
542-75-6	1,3-Dichloropropene (total)	ND		400	368	92	400	369	92	0	50-150/30 [a]
100-41-4	Ethylbenzene	433		200	636	102	200	637	102	0	47-146/30
67-72-1	Hexachloroethane	ND		200	168	84	200	173	87	3	32-128/39
78-83-1	Isobutyl Alcohol	154		2000	1330	59	2000	1380	61	4	33-142/54
74-83-9	Methyl Bromide	ND		200	121	61	200	113	57	7	1-150/64
74-87-3	Methyl Chloride	1.6		200	171	85	200	171	85	0	16-146/29
75-09-2	Methylene Chloride	ND		200	205	103	200	205	103	0	55-134/36
78-93-3	Methyl Ethyl Ketone	11.9		500	405	79	500	416	81	3	54-142/39
108-10-1	4-Methyl-2-pentanone	ND		500	468	94	500	477	95	2	60-140/40
1634-04-4	Methyl Tert Butyl Ether	ND		200	183	92	200	183	92	0	52-146/32
100-42-5	Styrene	ND		200	207	104	200	210	105	1	67-128/35
630-20-6	1,1,1,2-Tetrachloroethane	ND		200	185	93	200	193	97	4	67-121/35
79-34-5	1,1,2,2-Tetrachloroethane	ND		200	188	94	200	185	93	2	64-133/38

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47472-4MS	1I038525.D	10	09/13/18	NN	n/a	n/a	V1I1787
LA47472-4MSD	1I038527.D	10	09/13/18	NN	n/a	n/a	V1I1787
LA47472-4	1I038521.D	5	09/12/18	NN	n/a	n/a	V1I1787

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	LA47472-4 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		200	190	95	200	191	96	1	58-135/37
108-88-3	Toluene	40.2		200	229	94	200	234	97	2	36-155/17
71-55-6	1,1,1-Trichloroethane	ND		200	188	94	200	189	95	1	63-128/36
79-00-5	1,1,2-Trichloroethane	1.3		200	181	90	200	186	92	3	61-138/17
79-01-6	Trichloroethylene	ND		200	185	93	200	186	93	1	57-131/36
75-69-4	Trichlorofluoromethane	ND		200	171	86	200	169	85	1	31-156/36
75-01-4	Vinyl Chloride	ND		200	181	91	200	180	90	1	22-155/49
	m,p-Xylene	835		400	1240	101	400	1240	101	0	35-159/31
95-47-6	o-Xylene	36.4		200	233	98	200	232	98	0	50-144/35
1330-20-7	Xylene (total)	871		600	1470	100	600	1480	102	1	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA47472-4	Limits
17060-07-0	1,2-Dichloroethane-D4	91%	92%	92%	84-124%
2037-26-5	Toluene-D8	99%	100%	100%	83-115%
460-00-4	4-Bromofluorobenzene	96%	98%	97%	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: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12226-MB	A0024620.D	1	09/15/18	PC	09/11/18	OP12226	EA634

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10

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	ND	5.0	ug/l	
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: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12226-MB	A0024620.D	1	09/15/18	PC	09/11/18	OP12226	EA634

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10

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	63%	23-85%
4165-62-2	Phenol-d5	49%	10-69%
118-79-6	2,4,6-Tribromophenol	85%	48-138%
4165-60-0	Nitrobenzene-d5	82%	51-128%
321-60-8	2-Fluorobiphenyl	75%	55-122%
1718-51-0	Terphenyl-d14	94%	43-138%

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12226-BS	A0024621.D	1	09/15/18	PC	09/11/18	OP12226	EA634
OP12226-BSD	A0024622.D	1	09/15/18	PC	09/11/18	OP12226	EA634

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	5	4.1	82	4.0	80	2	63-104/19
120-83-2	2,4-Dichlorophenol	5	4.5	90	4.5	90	0	68-112/19
105-67-9	2,4-Dimethylphenol	5	4.4	88	4.2	84	5	64-110/20
51-28-5	2,4-Dinitrophenol	25	21.5	86	22.1	88	3	51-121/30
100-02-7	4-Nitrophenol	25	13.1	52	13.3	53	2	20-68/23
87-86-5	Pentachlorophenol	25	24.1	96	23.7	95	2	52-120/29
108-95-2	Phenol	5	2.6	52	2.4	48	8	18-67/20
58-90-2	2,3,4,6-Tetrachlorophenol	5	4.8	96	4.6	92	4	67-121/21
95-95-4	2,4,5-Trichlorophenol	5	4.5	90	4.8	96	6	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	4.1	82	4.0	80	2	67-114/28
208-96-8	Acenaphthylene	5	4.2	84	4.2	84	0	67-119/26
62-53-3	Aniline	5	3.7	74	4.1	82	10	40-114/40
120-12-7	Anthracene	5	4.4	88	4.2	84	5	68-121/24
56-55-3	Benzo(a)anthracene	5	4.4	88	4.3	86	2	69-113/20
50-32-8	Benzo(a)pyrene	5	4.7	94	4.6	92	2	71-124/22
205-99-2	Benzo(b)fluoranthene	5	4.7	94	4.6	92	2	72-120/22
207-08-9	Benzo(k)fluoranthene	5	4.5	90	4.4	88	2	71-124/21
92-52-4	1,1'-Biphenyl	5	4.1	82	4.0	80	2	65-122/29
85-68-7	Butyl Benzyl Phthalate	5	4.9	98	4.9	98	0	73-123/21
106-47-8	4-Chloroaniline	5	5.0	100	4.8	96	4	58-113/51
111-44-4	bis(2-Chloroethyl)ether	5	4.3	86	4.2	84	2	50-118/28
108-60-1	2,2'-Oxybis(1-chloropropane)	5	4.3	86	4.1	82	5	43-138/21
91-58-7	2-Chloronaphthalene	5	4.0	80	4.0	80	0	64-114/30
218-01-9	Chrysene	5	4.5	90	4.4	88	2	70-115/20
53-70-3	Dibenzo(a,h)anthracene	5	4.9	98	4.7	94	4	70-124/21
132-64-9	Dibenzofuran	5	4.2	84	4.0	80	5	67-117/27
91-94-1	3,3'-Dichlorobenzidine	5	6.6	132* [a]	6.4	128* [a]	3	69-122/38
84-66-2	Diethyl Phthalate	5	4.5	90	4.5	90	0	71-123/21
131-11-3	Dimethyl Phthalate	5	4.4	88	4.4	88	0	69-119/20
117-84-0	Di-n-octyl Phthalate	5	5.3	106	5.2	104	2	66-121/22
99-65-0	1,3-Dinitrobenzene	25	24.4	98	24.0	96	2	71-122/21
121-14-2	2,4-Dinitrotoluene	5	4.7	94	4.7	94	0	73-122/21
606-20-2	2,6-Dinitrotoluene	5	4.6	92	4.5	90	2	72-121/21
117-81-7	bis(2-Ethylhexyl)phthalate	5	4.9	98	4.8	96	2	68-126/21
206-44-0	Fluoranthene	5	4.7	94	4.5	90	4	73-120/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12226-BS	A0024621.D	1	09/15/18	PC	09/11/18	OP12226	EA634
OP12226-BSD	A0024622.D	1	09/15/18	PC	09/11/18	OP12226	EA634

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
86-73-7	Fluorene	5	4.3	86	4.2	84	2	69-118/25
118-74-1	Hexachlorobenzene	5	4.1	82	4.0	80	2	67-117/23
87-68-3	Hexachlorobutadiene	5	3.0	60	2.7	54	11	42-120/35
77-47-4	Hexachlorocyclopentadiene	5	3.1	62	2.8	56	10	35-123/48
193-39-5	Indeno(1,2,3-cd)pyrene	5	4.9	98	4.7	94	4	70-123/21
78-59-1	Isophorone	5	4.5	90	4.4	88	2	70-119/19
91-57-6	2-Methylnaphthalene	5	4.0	80	4.0	80	0	65-113/27
91-20-3	Naphthalene	5	4.0	80	3.9	78	3	63-114/23
88-74-4	2-Nitroaniline	25	25.3	101	25.2	101	0	68-125/21
99-09-2	3-Nitroaniline	25	24.2	97	24.0	96	1	69-117/23
100-01-6	4-Nitroaniline	25	25.2	101	25.1	100	0	67-122/19
98-95-3	Nitrobenzene	5	4.3	86	4.2	84	2	69-116/21
621-64-7	N-Nitroso-di-n-propylamine	5	4.5	90	4.3	86	5	67-120/20
86-30-6	N-Nitrosodiphenylamine	5	4.5	90	4.3	86	5	67-119/25
85-01-8	Phenanthrene	5	4.3	86	4.1	82	5	70-117/23
129-00-0	Pyrene	5	4.5	90	4.3	86	5	70-119/21
95-94-3	1,2,4,5-Tetrachlorobenzene	5	3.6	72	3.4	68	6	55-117/35
120-82-1	1,2,4-Trichlorobenzene	5	3.7	74	3.6	72	3	56-111/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	68%	66%	23-85%
4165-62-2	Phenol-d5	54%	50%	10-69%
118-79-6	2,4,6-Tribromophenol	103%	98%	48-138%
4165-60-0	Nitrobenzene-d5	85%	82%	51-128%
321-60-8	2-Fluorobiphenyl	81%	76%	55-122%
1718-51-0	Terphenyl-d14	94%	89%	43-138%

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

* = Outside of Control Limits.

GC Volatiles

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QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLE1483-MB2	LE335978.D	1	09/07/18	SV	n/a	n/a	GLE1483

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

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	92% [b]	70-130%

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

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC1819-MB1	LC379884.D	1	09/07/18	MB	n/a	n/a	GLC1819

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

LA47398-10, LA47398-11, LA47398-12, LA47398-13, LA47398-14, LA47398-15, LA47398-16, LA47398-17, LA47398-18

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	87% [a]	70-130%
615-59-8	2,5-Dibromotoluene	86% [b]	70-130%

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

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12214-MB	LK113131.D	1	09/11/18	DF	09/09/18	OP12214	GLK724

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10

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	101%	55-149%

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLE1483-BS1	LE335973.D	1	09/07/18	SV	n/a	n/a	GLE1483
GLE1483-BSD1	LE335974.D	1	09/07/18	SV	n/a	n/a	GLE1483

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	150	145	97	144	96	1	70-130/30
	Aliphatics > C8-C10 (Unadj.)	250	253	101	251	100	1	70-130/30
	Aromatics > C8-C10 (Unadj.)	250	242	97	241	96	0	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	105% [b]	106% [a]	70-130%
615-59-8	2,5-Dibromotoluene	96%	98% [b]	70-130%

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

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC1819-BS1	LC379882.D	1	09/07/18	MB	n/a	n/a	GLC1819
GLC1819-BSD1	LC379883.D	1	09/07/18	MB	n/a	n/a	GLC1819

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

LA47398-10, LA47398-11, LA47398-12, LA47398-13, LA47398-14, LA47398-15, LA47398-16, LA47398-17, LA47398-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics C6-C8 (Unadj.)	150	140	93	129	86	8	70-130/30
	Aliphatics > C8-C10 (Unadj.)	250	238	95	231	92	3	70-130/30
	Aromatics > C8-C10 (Unadj.)	250	238	95	235	94	1	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	98% [a]	89% [a]	70-130%
615-59-8	2,5-Dibromotoluene	93% [b]	91% [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: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12214-BS	LK113132.D	1	09/11/18	DF	09/09/18	OP12214	GLK724
OP12214-BSD	LK113133.D	1	09/11/18	DF	09/09/18	OP12214	GLK724

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10

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	0.29	115	0.31	123	7	60-148/18

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
348-51-6	1-Chloro-2-fluorobenzene	99%	102%	55-149%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA47398-1MS	LE335986.D	5	09/07/18	SV	n/a	n/a	GLE1483
LA47398-1MSD	LE335987.D	5	09/07/18	SV	n/a	n/a	GLE1483
LA47398-1	LE335981.D	1	09/07/18	SV	n/a	n/a	GLE1483

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	LA47398-1 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.)	64.7		750	784	96	750	797	98	2	70-130/50
	Aliphatics > C8-C10 (Unadj.)	14.7		1250	1250	99	1250	1310	104	5	70-130/50
	Aromatics > C8-C10 (Unadj.)	13.8		1250	1200	95	1250	1240	98	3	70-130/50

CAS No.	Surrogate Recoveries	MS	MSD	LA47398-1	Limits
615-59-8	2,5-Dibromotoluene	102%	112%	105%	70-130%
615-59-8	2,5-Dibromotoluene	95%	102%	90%	70-130%

* = 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: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12205-MB	X0050681.D	1	09/10/18	JT	09/08/18	OP12205	GLB1598

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

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	83%	40-140%
321-60-8	2-Fluorobiphenyl	87%	40-140%

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12205-MB	Y0050681.D	1	09/10/18	JT	09/08/18	OP12205	GLB1599

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

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.)	91.5	140	ug/l	J

CAS No.	Surrogate Recoveries		Limits
3386-33-2	1-Chlorooctadecane	71%	40-140%

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12207-MB	X0050756.D	1	09/12/18	JT	09/10/18	OP12207	GLB1606

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

LA47398-10

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	87%	40-140%
321-60-8	2-Fluorobiphenyl	82%	40-140%

Method Blank Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12207-MB	Y0050756.D	1	09/12/18	JT	09/10/18	OP12207	GLB1607

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

LA47398-10

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.)	101	140	ug/l	J

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

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12205-BS	X0050682.D	1	09/10/18	JT	09/08/18	OP12205	GLB1598
OP12205-BSD	X0050683.D	1	09/10/18	JT	09/08/18	OP12205	GLB1598

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aromatics > C10-C12 (Unadj.)	460	334	73	339	73	1	40-140/30
	Aromatics > C12-C16 (Unadj.)	1380	1090	79	1110	80	2	40-140/30
	Aromatics > C16-C21 (Unadj.)	2300	1920	84	1950	84	2	40-140/30
	Aromatics > C21-C35 (Unadj.)	3680	3370	92	3420	92	1	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	83%	84%	40-140%
321-60-8	2-Fluorobiphenyl	77%	78%	40-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12205-BS	Y0050682.D	1	09/10/18	JT	09/08/18	OP12205	GLB1599
OP12205-BSD	Y0050683.D	1	09/10/18	JT	09/08/18	OP12205	GLB1599

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics > C10-C12 (Unadj.)	460	221	48	224	48	1	40-140/30
	Aliphatics > C12-C16 (Unadj.)	919	460	50	472	51	3	40-140/30
	Aliphatics > C16-C35 (Unadj.)	4140	1880	45	1930	46	3	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
3386-33-2	1-Chlorooctadecane	52%	52%	40-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12207-BS	X0050713.D	1	09/11/18	JT	09/10/18	OP12207	GLB1602
OP12207-BSD	X0050714.D	1	09/11/18	JT	09/10/18	OP12207	GLB1602

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

LA47398-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aromatics > C10-C12 (Unadj.)	469	318	68	346	74	8	40-140/30
	Aromatics > C12-C16 (Unadj.)	1410	1040	74	1140	81	9	40-140/30
	Aromatics > C16-C21 (Unadj.)	2350	1810	77	1990	85	9	40-140/30
	Aromatics > C21-C35 (Unadj.)	3750	3120	83	3410	91	9	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	78%	84%	40-140%
321-60-8	2-Fluorobiphenyl	75%	84%	40-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12207-BS	Y0050713.D	1	09/11/18	JT	09/10/18	OP12207	GLB1603
OP12207-BSD	Y0050714.D	1	09/11/18	JT	09/10/18	OP12207	GLB1603

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

LA47398-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
	Aliphatics > C10-C12 (Unadj.)	469	239	51	250	53	4	40-140/30
	Aliphatics > C12-C16 (Unadj.)	938	509	54	531	57	4	40-140/30
	Aliphatics > C16-C35 (Unadj.)	4220	2120	50	2200	52	4	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
3386-33-2	1-Chlorooctadecane	57%	58%	40-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12205-MS	X0050692.D	1	09/10/18	JT	09/08/18	OP12205	GLB1598
OP12205-MSD	X0050693.D	1	09/10/18	JT	09/08/18	OP12205	GLB1598
LA47417-4	X0050704.D	1	09/11/18	JT	09/08/18	OP12205	GLB1598

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	LA47417-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	Aromatics >C10-C12 (Unadj.)	ND		500	370	74	500	369	74	0	40-140/50
	Aromatics >C12-C16 (Unadj.)	ND		1500	1220	81	1500	1210	81	1	40-140/50
	Aromatics >C16-C21 (Unadj.)	ND		2500	2130	85	2500	2110	84	1	40-140/50
	Aromatics >C21-C35 (Unadj.)	ND		4000	3590	90	4000	3620	91	1	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	LA47417-4	Limits
84-15-1	o-Terphenyl	83%	83%	88%	40-140%
321-60-8	2-Fluorobiphenyl	83%	85%	82%	40-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA47398
Account: HETILAL Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12205-MS	Y0050692.D	1	09/10/18	JT	09/08/18	OP12205	GLB1599
OP12205-MSD	Y0050693.D	1	09/10/18	JT	09/08/18	OP12205	GLB1599
LA47417-4	Y0050704.D	1	09/11/18	JT	09/08/18	OP12205	GLB1599

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

LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9

CAS No.	Compound	LA47417-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	Aliphatics > C10-C12 (Unadj.)	ND		500	312	62	500	302	60	3	40-140/50
	Aliphatics > C12-C16 (Unadj.)	ND		1000	663	66	1000	643	64	3	40-140/50
	Aliphatics > C16-C35 (Unadj.)	143		4500	2810	59	4500	2730	57	3	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	LA47417-4	Limits
3386-33-2	1-Chlorooctadecane	68%	67%	78%	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: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	100	6.9	9.3	5.9	<100
Antimony	1.0	.043	.34		
Arsenic	1.0	.062	.26	0.11	<1.0
Barium	1.0	.033	.46	-0.015	<1.0
Beryllium	1.0	.0077	.28		
Boron	20	1.3	2.9		
Cadmium	0.50	.011	.12	0.062	<0.50
Calcium	100	5.7	20	-50	<100
Cerium	1.0	.0041	.16		
Chromium	1.0	.11	.15	-0.037	<1.0
Cobalt	1.0	.012	.14		
Copper	1.0	.91	.74		
Iron	100	48	16	-24	<100
Lanthanum	1.0	.0038	.41		
Lithium	2.0	.1	.61		
Lead	1.0	.0081	.13	-0.26	<1.0
Magnesium	100	1.6	11	-5.6	<100
Manganese	2.0	.48	.53	-0.061	<2.0
Molybdenum	1.0	.048	.89		
Nickel	1.0	.037	.2		
Potassium	100	3.4	7.6	-45	<100
Selenium	5.0	.38	3.1	-0.19	<5.0
Silver	1.0	.0047	.13	0.0041	<1.0
Silicon	500	6.6	130		
Sodium	100	24	9.9	-14	<100
Strontium	2.0	.12	.27	0.054	<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	-0.62	<5.0

Associated samples MP12641: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F,

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

Metal	RL	IDL	MDL	MB raw	final

LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

Metal	LA47398-1 Original	MS	Spikelot MPICPMS6	% Rec	QC Limits
Aluminum	60200	55200	5100	-98.0(a)	75-125
Antimony					
Arsenic	18.0	107	100	89.0	75-125
Barium	13800	11300	100	-2500.0a	75-125
Beryllium					
Boron					
Cadmium	1.8	97.6	100	95.8	75-125
Calcium	27400	26300	5000	-22.0(a)	75-125
Cerium					
Chromium	113	188	100	75.0	75-125
Cobalt					
Copper					
Iron	70900	62300	5000	-172.0(a	75-125
Lanthanum					
Lithium					
Lead	40.0	122	100	82.0	75-125
Magnesium	20900	21600	5000	14.0 (a)	75-125
Manganese	1410	1230	100	-180.0(a	75-125
Molybdenum					
Nickel					
Potassium	11600	14000	5000	48.0N(b)	75-125
Selenium	8.6	487	500	95.7	75-125
Silver	0.67	95.8	100	95.1	75-125
Silicon					
Sodium	371000	302000	5000	-1380.0a	75-125
Strontium	814	749	100	-65.0(a)	75-125
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	244	288	100	44.0N(b)	75-125

Associated samples MP12641: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F,

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

Metal	LA47398-1 Original MS	Spikelot MPICPMS6 % Rec	QC Limits

LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

Metal	LA47398-1 Original	MSD	Spikelot MPICPMS6	% Rec	MSD RPD	QC Limit
Aluminum	60200	56200	5100	-78.4(a)	1.8	20
Antimony						
Arsenic	18.0	119	100	101.0	10.6	20
Barium	13800	12200	100	-1600.0a	7.7	20
Beryllium						
Boron						
Cadmium	1.8	103	100	101.2	5.4	20
Calcium	27400	28600	5000	24.0 (a)	8.4	20
Cerium						
Chromium	113	202	100	89.0	7.2	20
Cobalt						
Copper						
Iron	70900	69100	5000	-36.0(a)	10.4	20
Lanthanum						
Lithium						
Lead	40.0	127	100	87.0	4.0	20
Magnesium	20900	24100	5000	64.0 (a)	10.9	20
Manganese	1410	1370	100	-40.0(a)	10.8	20
Molybdenum						
Nickel						
Potassium	11600	14400	5000	56.0N(b)	2.8	20
Selenium	8.6	510	500	100.3	4.6	20
Silver	0.67	103	100	102.3	7.2	20
Silicon						
Sodium	371000	339000	5000	-640.0(a	11.5	20
Strontium	814	841	100	27.0 (a)	11.6	20
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	244	334	100	90.0	14.8	20

Associated samples MP12641: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F,

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

Metal	LA47398-1 Original MSD	Spikelot MPICPMS6 % Rec	MSD RPD	QC Limit

LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 09/06/18

Metal	BSP Result	Spikelot MPICPMS6	% Rec	QC Limits
Aluminum	4560	5100	89.4	80-120
Antimony				
Arsenic	96.0	100	96.0	80-120
Barium	89.9	100	89.9	80-120
Beryllium				
Boron				
Cadmium	95.8	100	95.8	80-120
Calcium	4840	5000	96.8	80-120
Cerium				
Chromium	95.6	100	95.6	80-120
Cobalt				
Copper				
Iron	4900	5000	98.0	80-120
Lanthanum				
Lithium				
Lead	92.6	100	92.6	80-120
Magnesium	4750	5000	95.0	80-120
Manganese	96.7	100	96.7	80-120
Molybdenum				
Nickel				
Potassium	4850	5000	97.0	80-120
Selenium	491	500	98.2	80-120
Silver	96.3	100	96.3	80-120
Silicon				
Sodium	4800	5000	96.0	80-120
Strontium	95.6	100	95.6	80-120
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	101	100	101.0	80-120

Associated samples MP12641: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F,

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

Metal	BSP Result	Spikelot MPICPMS6 % Rec	QC Limits

LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

Metal	LA47398-1 Original	SDL 10	%DIF	QC Limits
Aluminum	60200	46600	22.6*(a)	0-10
Antimony				
Arsenic	18.0	21.8	21.0 (b)	0-10
Barium	13800	10700	22.5*(a)	0-10
Beryllium				
Boron				
Cadmium	1.81	4.19	130.9(b)	0-10
Calcium	27400	19000	30.5*(a)	0-10
Cerium				
Chromium	113	82.3	27.4*(a)	0-10
Cobalt				
Copper				
Iron	70900	55500	21.8*(a)	0-10
Lanthanum				
Lithium				
Lead	40.0	20.7	48.3*(a)	0-10
Magnesium	20900	15900	23.9*(a)	0-10
Manganese	1410	1090	22.5*(a)	0-10
Molybdenum				
Nickel				
Potassium	11600	7230	37.7*(a)	0-10
Selenium	8.56	0.00	100.0(b)	0-10
Silver	0.669	0.754	12.7 (b)	0-10
Silicon				
Sodium	371000	285000	23.1*(a)	0-10
Strontium	814	632	22.4*(a)	0-10
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	244	174	28.4 (b)	0-10

Associated samples MP12641: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F,

SERIAL DILUTION RESULTS SUMMARY

Login Number: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

	LA47398-1	QC
Metal	Original SDL 10:50%DIF	Limits

LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12641 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/06/18

Metal	Sample ml	Final ml	LA47398-1 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										
Potassium	0.2	10	11600	232	5564	0.025	2000	5000	106.6	75-125
Silicon										
Thallium										
Tin										
Titanium										
Uranium										
Vanadium										
Zinc	0.2	10	243.7	4.874	98.37	0.1	10	100	93.5	75-125

Associated samples MP12641: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F, LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12665 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/07/18

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.06	.081	-0.012	<0.20

Associated samples MP12665: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F, LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12665 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/07/18

Metal	LA47398-2 Original	MS	Spikelot HGSPIKE1	% Rec	QC Limits
Mercury	0.0	5.2	5	104.0	75-125

Associated samples MP12665: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F, LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12665 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/07/18

Metal	LA47398-2 Original	MSD	Spikelot HGSPIKE1	% Rec	MSD RPD	QC Limit
Mercury	0.0	5.8	5	116.0	10.9	20

Associated samples MP12665: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F, LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12665
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/07/18

Metal	BSP Result	Spikelot HGSPIKE1	% Rec	QC Limits
Mercury	5.5	5	110.0	80-120

Associated samples MP12665: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F, LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: LA47398
Account: HETILAL - Hydro-Environmental Technology, Inc.
Project: 8060.00 (RL) Indigo-Desoto Parish, LA

QC Batch ID: MP12665 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/07/18

Metal	LA47398-2 Original	SDL 1:5	%DIF	QC Limits
Mercury	0.00	0.00	NC	0-

Associated samples MP12665: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10, LA47398-1F, LA47398-2F, LA47398-3F, LA47398-4F, LA47398-5F, LA47398-6F, LA47398-7F, LA47398-8F, LA47398-9F, LA47398-10F

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

Misc. Forms

Custody Documents and Other Forms

(SGS Houston, TX)

Includes the following where applicable:

- Chain of Custody

SGS

CHAIN OF CUSTODY

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 # LA47398

Client / Reporting Information

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

Project Information

- Project Name: 8060.00 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): BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	LAB USE ONLY
1	HANSON RELIEF WELL		9/4/18	10:45:00 AM	KC/LV	AQ										X	
2	BILLINGSLEY RELIEF WELL		9/4/18	11:40:00 AM	KC/LV	AQ										X	
3	DAVID MASON RELIEF WELL		9/4/18	2:50:00 PM	KC/LV	AQ										X	
4	DENNISON RIG SUPPLY WELL		9/4/18	4:30:00 PM	KC/LV	AQ										X	
5	GAMBLE RIG SUPPLY WELL		9/4/18	4:45:00 PM	KC/LV	AQ										X	
6	FIELD DUPLICATE		9/4/18	4:35:00 PM	KC/LV	AQ										X	
7	BRYANT POND 2'		9/5/18	11:45:00 AM	KC/LV	AQ										X	
8	BRYANT POND 7'		9/5/18	11:15:00 AM	KC/LV	AQ										X	
9	BRYANT POND 12'		9/5/18	10:45:00 AM	KC/LV	AQ										X	
10	EQUIPMENT BLANK		9/4/18	10:40:00 AM	KC/LV	AQ										X	

Stamps: AUDITED BY: / VERIFIED BY:

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

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 9/17/2018

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS PM): / Date:

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

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 [signature]	090618	1 [signature]	2 [signature]	9.6.18	2 [signature]
Relinquished by Sampler: 3 [signature] 9-6-18	Date Time: 2305	Received By: 3 [signature] 2305 9-6-18	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	☑ Intact ☐ Not intact	Preserved where applicable ☐ On Ice ☑ Cooler Temp. 3.4

9.1

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LA47398: Chain of Custody
Page 1 of 5
SGS Houston, TX

Cooler 3

Date / Time: 9/6/2018 2:28:50 PM
CSR: ralphf
Job #: LA47398
Client Project: 8060.00 Indigo-Desoto Parish, LA
Deliverable: COMMB
TAT: Due 9/17/2018

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
LA47398-1	HANSON RELIEF WELL	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/4/2018	10:45:00 AM	
LA47398-2	BILLINGSLEY RELIEF WELL	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/4/2018	11:40:00 AM	
LA47398-3	DAVID MASON RELIEF WELL	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/4/2018	2:50:00 PM	
LA47398-4	DENNISON RIG SUPPLY WELL	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/4/2018	4:30:00 PM	
LA47398-5	GAMBLE RIG SUPPLY WELL	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/4/2018	4:45:00 PM	
LA47398-6	FIELD DUPLICATE	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/4/2018	4:35:00 PM	
LA47398-7	BRYANT POND 2'	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/5/2018	11:45:00 AM	
LA47398-8	BRYANT POND 7'	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/5/2018	11:15:00 AM	
LA47398-9	BRYANT POND 12'	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/5/2018	10:45:00 AM	

10 - 500ml plastic ump

9.1
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LA47398-10	EQUIPMENT BLANK	BROIC9056 ,CHLIC9056 ,SCON ,SIL ,SO4IC9056 ,TDS , XCARBICALK	3W2 ,3W2F ,OL ,RLX-464 VW ,RSM-9 1B-3 ,RW-3 11B4 ,	KC/LV	9/4/2018	10:40:00 AM

Comments:

Sample Management Receipt: _____ Date: 9-6-18 2305

9.1

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LA47398: Chain of Custody
Page 3 of 5

SGS Sample Receipt Summary

Job Number: LA47398 **Client:** SGS **Project:** 8060.00 INDIGO

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

No. Coolers: 1 **Therm ID:** IR-4; **Temp Adjustment Factor:** 0;

Cooler Temps (Initial/Adjusted): #1: (3.4/3.4);

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 #: LA47398 **Date / Time Received:** 9/6/2018 11:05:00 PM **Initials:** DS

Client: SGS

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	LA47398-1	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4
1	LA47398-2	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4
1	LA47398-3	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4
1	LA47398-4	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4
1	LA47398-5	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4
1	LA47398-6	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4
1	LA47398-7	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4
1	LA47398-8	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4
1	LA47398-9	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4
1	LA47398-10	500ml	1	M3B	N/P	Note #2 - Preservative check not applicable.	IR-4	3.4	0	3.4

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: LA47398
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	GN92695	5.0	2.0	mg/l				
Alkalinity, Carbonate	GN92696	5.0	0.0	mg/l				
Alkalinity, Total as CaCO3	GN92694	5.0	0.0	mg/l	100	103	103.0	90-100%
Bromide	GP49404/GN92637	0.50	0.0	mg/l	10	9.64	96.4	90-110%
Chloride	GP49406/GN92638	0.50	0.0	mg/l	10	10.2	102.0	90-110%
Silica, Dissolved	GN92737	0.070	0.0	mg/l	1.07	1.0	93.5	80-120%
Solids, Total Dissolved	GN92562	10	7.0	mg/l	500	494	98.8	88-110%
Specific Conductivity	GN92605	1.0	<1.0	umhos/cm				
Specific Conductivity	GN92606	1.0	<1.0	umhos/cm				
Sulfate	GP49404/GN92637	0.50	0.0	mg/l	10	9.66	96.6	90-110%

Associated Samples:
Batch GN92562: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GN92605: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9
Batch GN92606: LA47398-10
Batch GN92694: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GN92695: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GN92696: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GN92737: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GP49404: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GP49406: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: LA47398
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, Bicarbonate	GN92695	LA47398-1	mg/l	415	416	0.0	0-10%
Alkalinity, Carbonate	GN92696	LA47398-1	mg/l	4.8	4.4	0.0	0-20%
Alkalinity, Total as CaCO3	GN92694	LA47398-1	mg/l	420	420	0.0	0-10%
Bromide	GP49404/GN92637	LA47398-4	mg/l	0.78	0.79	1.3	0-19%
Chloride	GP49406/GN92638	LA47398-4	mg/l	127	127	0.0	0-13%
Silica, Dissolved	GN92737	LA47398-10	mg/l	0.0	0.0	0.0	0-20%
Solids, Total Dissolved	GN92562	LA47398-9	mg/l	298	308	2.6	0-5%
Specific Conductivity	GN92605	TD26864-1	umhos/cm	3040	3040	0.0	0-10%
Specific Conductivity	GN92606	LA47398-10	umhos/cm	1.1	1.1	0.0	0-10%
Sulfate	GP49404/GN92637	LA47398-4	mg/l	0.0	0.0	0.0	0-20%

Associated Samples:
Batch GN92562: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GN92605: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9
Batch GN92606: LA47398-10
Batch GN92694: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GN92695: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GN92696: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GN92737: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GP49404: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GP49406: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: LA47398
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	GN92694	LA47398-1	mg/l	420	25	445	100.0	75-117%
Bromide	GP49404/GN92637	LA47398-4	mg/l	0.78	10	10.6	98.2	80-120%
Chloride	GP49406/GN92638	LA47398-4	mg/l	127	100	251	124.0N	80-120%
Silica, Dissolved	GN92737	LA47398-10	mg/l	0.0	1.07	0.92	86.0	75-125%
Sulfate	GP49404/GN92637	LA47398-4	mg/l	0.0	10	10.2	102.0	80-120%

Associated Samples:
Batch GN92694: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GN92737: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GP49404: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
Batch GP49406: LA47398-1, LA47398-2, LA47398-3, LA47398-4, LA47398-5, LA47398-6, LA47398-7, LA47398-8, LA47398-9, LA47398-10
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits