

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

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Automated Report

Technical Report for

Hydro-Environmental Technology, Inc.

8060.00 (RL) Indigo-Desoto Parish, LA

SGS Job Number: LA49121

Sampling Date: 10/23/18

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: 20



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

Ron Benjamin
Ron Benjamin
Lab Director

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.



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

RE: Accutest Job #L49121
8060.00 (RL) 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.

The sample ID on Fradition 2 has been changed to 031-7776Z (Nelson-Johnson #3 Rig Supply) at the request of the client.

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,

A handwritten signature in black ink, appearing to read 'Ralph Frye'.

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

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Sample Summary

Hydro-Environmental Technology, Inc.
8060.00 (RL) Indigo-Desoto Parish, LA

Job No: LA49121

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
LA49121-1	10/23/18	11:25	LV/EM10/25/18	AQ	Water	031-8321Z (NELSON-MASON 1 ALT RIG SUPPLY)
LA49121-2	10/23/18	14:20	LV/EM10/25/18	AQ	Water	031-7776Z (NELSON-JOHNSON #3 RIG SUPPLY)

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	031-8321Z (NELSON-MASON 1 ALT RIG SUPPLY)	Date Sampled:	10/23/18
Lab Sample ID:	LA49121-1	Date Received:	10/25/18
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0056929.D	1	10/26/18 18:40	NN	n/a	n/a	V2J1650
Run #2							

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

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
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

Report of Analysis

Client Sample ID: 031-8321Z (NELSON-MASON 1 ALT RIG SUPPLY)	
Lab Sample ID: LA49121-1	Date Sampled: 10/23/18
Matrix: AQ - Water	Date Received: 10/25/18
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	114%		84-124%
2037-26-5	Toluene-D8	97%		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

Report of Analysis

Client Sample ID:	031-7776Z (NELSON-JOHNSON #3 RIG SUPPLY)	Date Sampled:	10/23/18
Lab Sample ID:	LA49121-2	Date Received:	10/25/18
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	8060.00 (RL) Indigo-Desoto Parish, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0056931.D	1	10/26/18 19:07	NN	n/a	n/a	V2J1650
Run #2							

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

VOA RECAP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0050	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	mg/l	
75-25-2	Bromoform	ND	0.0010	mg/l	
75-15-0	Carbon Disulfide	ND	0.0010	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	mg/l	
75-00-3	Chloroethane	ND	0.0010	mg/l	
67-66-3	Chloroform	ND	0.0010	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	mg/l	
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

Report of Analysis

Client Sample ID: 031-7776Z (NELSON-JOHNSON #3 RIG SUPPLY)	
Lab Sample ID: LA49121-2	Date Sampled: 10/23/18
Matrix: AQ - Water	Date Received: 10/25/18
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	115%		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

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

LA49121

SAMPLE CHAIN-OF-CUSTODY RECORD

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

Laboratory: SGS Lafayette
 Collected By: LVIEM
 Company: Hydro-Environmental Technology, Inc.
 Date: 10/23/2018

Sample I.D.	Type	Date/Time Sampled	Containers	Analysis Requested/Method	Comments
031-8321Z (Nelson-Mason 1Alt Rig Supply)	AQ	10/23/2018 11:25	(4) 40mL Glass HCl	VOC 8260	4°C
031-7776Z (Nelson-Mason #3 Rig Supply)	AQ	10/23/2018 14:20	(4) 40mL Glass HCl	VOC 8260	4°C

RUSH

Relinquished By: *[Signature]*
 Date/Time: 10/24/18 1300
 Received By: *Ken J. Case*
 Date/Time: 10/24/18 1300

Relinquished By: *Ken J. Case*
 Date/Time: 10/25/18 1445
 Received By: *Walter Dawson*
 Date/Time: 10/25/18 1445

Analysis Due: Verbal: *NO T-25 (PU44)*
[Signature]

SGS Sample Receipt Summary

Job Number: LA49121

Client: HYDRO ENV

Project: INDIGO

Date / Time Received: 10/25/2018 2:45:00 PM

Delivery Method: Accutest Courier

Airbill #'s: _____

Cooler Temps (Initial/Adjusted): #1: (2.5/2.5):

Cooler Security

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

Cooler Temperature

- | | | | |
|----------------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Thermometer ID: | <u>DV441;</u> | | |
| 3. Cooler media: | <u>Ice (direct contact)</u> | | |
| 4. No. Coolers: | <u>1</u> | | |

Quality Control Preservation

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

Sample Integrity - Documentation

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

Sample Integrity - Condition

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

Sample Integrity - Instructions

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

Comments

LA49121: Chain of Custody

Page 2 of 3



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

LA49121

SAMPLE CHAIN-OF-CUSTODY RECORD

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

Laboratory: SGS Lafayette
 Collected By: LVIEM
 Company: Hydro-Environmental Technology, Inc.
 Date: 10/23/2018

Sample I.D.	Type	Date/Time Sampled	Containers	Analysis Requested/Method	Comments
031-8321Z (Nelson-Mason 1Alt Rig Supply)	AQ	10/23/2018 11:25	(4) 40mL Glass HCI	VOC 8260	4°C
031-7776Z (Nelson-Mason #3 Rig Supply) Johnson	AQ	10/23/2018 14:20	(4) 40mL Glass HCI	VOC 8260	4°C

RUSH

Relinquished By: *[Signature]*
 Date/Time: 10/24/18 1300
 Received By: *Ken J. Goff*
 Date/Time: 10/24/18 1300

Relinquished By: *Ken J. Goff*
 Date/Time: 10/25/18 1445
 Received By: *Walter Newman*
 Date/Time: 10-25-18 1445
 Written: *NO T-25 (PV44) RJV-74*

Analysis Due: Verbal

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: LA49121
 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
V2J1650-MB2	2J0056911.D	1	10/26/18	NN	n/a	n/a	V2J1650

The QC reported here applies to the following samples:

Method: SW846 8260B

LA49121-1, LA49121-2

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

4.1.1
4

Method Blank Summary

Job Number: LA49121
 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
V2J1650-MB2	2J0056911.D	1	10/26/18	NN	n/a	n/a	V2J1650

The QC reported here applies to the following samples:

Method: SW846 8260B

LA49121-1, LA49121-2

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	108%	84-124%
2037-26-5	Toluene-D8	98%	83-115%
460-00-4	4-Bromofluorobenzene	96%	89-111%

4.1.1
4

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49121
 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
V2J1650-BS1	2J0056905.D	1	10/26/18	NN	n/a	n/a	V2J1650
V2J1650-BSD1	2J0056907.D	1	10/26/18	NN	n/a	n/a	V2J1650

The QC reported here applies to the following samples:

Method: SW846 8260B

LA49121-1, LA49121-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	48.8	98	49.3	99	1	38-178/30
71-43-2	Benzene	20	18.9	95	19.5	98	3	82-119/30
75-27-4	Bromodichloromethane	20	19.9	100	20.6	103	3	79-120/30
75-25-2	Bromoform	20	18.2	91	19.8	99	8	68-128/30
75-15-0	Carbon Disulfide	20	19.5	98	20.5	103	5	64-133/30
56-23-5	Carbon Tetrachloride	20	19.2	96	19.3	97	1	69-132/30
108-90-7	Chlorobenzene	20	19.1	96	19.9	100	4	85-120/30
75-00-3	Chloroethane	20	21.6	108	22.8	114	5	33-170/30
67-66-3	Chloroform	20	19.4	97	19.8	99	2	80-122/30
124-48-1	Dibromochloromethane	20	20.0	100	20.5	103	2	73-125/30
96-12-8	1,2-Dibromo-3-chloropropane	20	19.0	95	20.5	103	8	67-131/30
541-73-1	m-Dichlorobenzene	20	19.0	95	20.1	101	6	84-121/30
95-50-1	o-Dichlorobenzene	20	18.9	95	20.0	100	6	83-120/30
106-46-7	p-Dichlorobenzene	20	18.7	94	19.4	97	4	83-122/30
75-34-3	1,1-Dichloroethane	20	19.1	96	19.8	99	4	78-124/30
107-06-2	1,2-Dichloroethane	20	21.1	106	22.6	113	7	74-127/30
75-35-4	1,1-Dichloroethylene	20	18.9	95	19.1	96	1	70-134/30
156-59-2	cis-1,2-Dichloroethylene	20	19.0	95	19.9	100	5	78-122/30
156-60-5	trans-1,2-Dichloroethylene	20	19.1	96	19.2	96	1	75-127/30
540-59-0	1,2-Dichloroethene (total)	40	38.1	95	39.1	98	3	78-123/30
78-87-5	1,2-Dichloropropane	20	17.9	90	19.1	96	6	82-120/30
10061-01-5	cis-1,3-Dichloropropene	20	20.0	100	21.0	105	5	79-122/30
10061-02-6	trans-1,3-Dichloropropene	20	19.5	98	20.5	103	5	78-124/30
542-75-6	1,3-Dichloropropene (total)	40	39.6	99	41.5	104	5	50-150/30 ^a
100-41-4	Ethylbenzene	20	19.6	98	20.6	103	5	84-117/30
67-72-1	Hexachloroethane	20	20.4	102	20.3	102	0	53-141/30
78-83-1	Isobutyl Alcohol	200	188	94	209	105	11	20-175/30
74-83-9	Methyl Bromide	20	20.5	103	21.6	108	5	37-198/30
74-87-3	Methyl Chloride	20	17.9	90	19.0	95	6	50-136/30
75-09-2	Methylene Chloride	20	18.7	94	19.4	97	4	71-130/30
78-93-3	Methyl Ethyl Ketone	50	46.5	93	49.6	99	6	59-149/30
108-10-1	4-Methyl-2-pentanone	50	51.2	102	54.9	110	7	74-131/30
1634-04-4	Methyl Tert Butyl Ether	20	18.8	94	19.7	99	5	70-126/30
100-42-5	Styrene	20	20.2	101	21.5	108	6	79-128/30
630-20-6	1,1,1,2-Tetrachloroethane	20	19.5	98	20.6	103	5	84-120/30
79-34-5	1,1,2,2-Tetrachloroethane	20	19.4	97	19.9	100	3	77-126/30

* = Outside of Control Limits.

4.2.1
4

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49121
 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
V2J1650-BS1	2J0056905.D	1	10/26/18	NN	n/a	n/a	V2J1650
V2J1650-BSD1	2J0056907.D	1	10/26/18	NN	n/a	n/a	V2J1650

The QC reported here applies to the following samples:

Method: SW846 8260B

LA49121-1, LA49121-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	20	18.2	91	19.5	98	7	75-133/30
108-88-3	Toluene	20	18.8	94	19.7	99	5	80-121/30
71-55-6	1,1,1-Trichloroethane	20	19.5	98	20.3	102	4	74-126/30
79-00-5	1,1,2-Trichloroethane	20	18.6	93	19.2	96	3	80-123/30
79-01-6	Trichloroethylene	20	19.1	96	19.9	100	4	62-125/30
75-69-4	Trichlorofluoromethane	20	20.2	101	20.6	103	2	62-148/30
75-01-4	Vinyl Chloride	20	19.0	95	20.0	100	5	67-130/30
	m,p-Xylene	40	39.6	99	41.1	103	4	82-121/30
95-47-6	o-Xylene	20	19.7	99	20.7	104	5	84-119/30
1330-20-7	Xylene (total)	60	59.3	99	61.9	103	4	81-122/30

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

(a) Advisory control limits.

* = Outside of Control Limits.

4.2.1
4

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA49121
 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
LA49027-3MS	2J0056943.D	5	10/26/18	NN	n/a	n/a	V2J1650
LA49027-3MSD	2J0056945.D	5	10/26/18	NN	n/a	n/a	V2J1650
LA49027-3	2J0056941.D	1	10/26/18	NN	n/a	n/a	V2J1650

The QC reported here applies to the following samples:

Method: SW846 8260B

LA49121-1, LA49121-2

CAS No.	Compound	LA49027-3 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	1.1	250	240	96	250	239	95	0	39-164/27
71-43-2	Benzene	ND	100	98.4	98	100	98.8	99	0	31-161/15
75-27-4	Bromodichloromethane	ND	100	103	103	100	105	105	2	64-122/36
75-25-2	Bromoform	ND	100	96.3	96	100	97.7	98	1	43-125/37
75-15-0	Carbon Disulfide	ND	100	99.4	99	100	101	101	2	38-138/36
56-23-5	Carbon Tetrachloride	ND	100	100	100	100	98.6	99	1	53-133/36
108-90-7	Chlorobenzene	ND	100	99.1	99	100	102	102	3	74-122/34
75-00-3	Chloroethane	ND	100	116	116	100	116	116	0	14-181/43
67-66-3	Chloroform	ND	100	100	100	100	100	100	0	65-130/24
124-48-1	Dibromochloromethane	ND	100	102	102	100	103	103	1	57-121/36
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	98.5	99	100	99.2	99	1	46-135/25
541-73-1	m-Dichlorobenzene	ND	100	96.2	96	100	99.8	100	4	70-120/35
95-50-1	o-Dichlorobenzene	ND	100	95.7	96	100	97.3	97	2	72-120/35
106-46-7	p-Dichlorobenzene	ND	100	93.5	94	100	99.1	99	6	68-120/35
75-34-3	1,1-Dichloroethane	ND	100	99.1	99	100	99.9	100	1	56-138/32
107-06-2	1,2-Dichloroethane	ND	100	113	113	100	116	116	3	51-141/39
75-35-4	1,1-Dichloroethylene	ND	100	95.6	96	100	98.7	99	3	48-139/37
156-59-2	cis-1,2-Dichloroethylene	ND	100	95.6	96	100	97.4	97	2	56-133/15
156-60-5	trans-1,2-Dichloroethylene	ND	100	96.1	96	100	98.6	99	3	59-128/37
540-59-0	1,2-Dichloroethane (total)	ND	200	192	96	200	196	98	2	54-134/30
78-87-5	1,2-Dichloropropane	ND	100	93.1	93	100	94.7	95	2	68-124/32
10061-01-5	cis-1,3-Dichloropropene	ND	100	94.5	95	100	95.9	96	1	62-120/35
10061-02-6	trans-1,3-Dichloropropene	ND	100	102	102	100	103	103	1	64-119/36
542-75-6	1,3-Dichloropropene (total)	ND	200	197	99	200	199	100	1	50-150/30 ^a
100-41-4	Ethylbenzene	ND	100	101	101	100	102	102	1	47-146/30
67-72-1	Hexachloroethane	ND	100	98.5	99	100	98.2	98	0	32-128/39
78-83-1	Isobutyl Alcohol	ND	1000	1010	101	1000	998	100	1	33-142/54
74-83-9	Methyl Bromide	ND	100	106	106	100	109	109	3	1-150/64
74-87-3	Methyl Chloride	ND	100	93.5	94	100	91.8	92	2	16-146/29
75-09-2	Methylene Chloride	ND	100	98.5	99	100	98.2	98	0	55-134/36
78-93-3	Methyl Ethyl Ketone	ND	250	248	99	250	256	102	3	54-142/39
108-10-1	4-Methyl-2-pentanone	ND	250	284	114	250	268	107	6	60-140/40
1634-04-4	Methyl Tert Butyl Ether	ND	100	94.8	95	100	98.3	98	4	52-146/32
100-42-5	Styrene	ND	100	106	106	100	108	108	2	67-128/35
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	103	103	100	102	102	1	67-121/35
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	104	104	100	106	106	2	64-133/38

* = Outside of Control Limits.

4.3.1
4

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA49121
 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
LA49027-3MS	2J0056943.D	5	10/26/18	NN	n/a	n/a	V2J1650
LA49027-3MSD	2J0056945.D	5	10/26/18	NN	n/a	n/a	V2J1650
LA49027-3	2J0056941.D	1	10/26/18	NN	n/a	n/a	V2J1650

The QC reported here applies to the following samples:

Method: SW846 8260B

LA49121-1, LA49121-2

CAS No.	Compound	LA49027-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	ND	100	94.1	94	100	98.5	99	5	58-135/37
108-88-3	Toluene	ND	100	98.2	98	100	96.8	97	1	36-155/17
71-55-6	1,1,1-Trichloroethane	ND	100	103	103	100	102	102	1	63-128/36
79-00-5	1,1,2-Trichloroethane	ND	100	95.2	95	100	98.5	99	3	61-138/17
79-01-6	Trichloroethylene	ND	100	99.4	99	100	98.4	98	1	57-131/36
75-69-4	Trichlorofluoromethane	ND	100	107	107	100	105	105	2	31-156/36
75-01-4	Vinyl Chloride	ND	100	96.5	97	100	96.8	97	0	22-155/49
	m,p-Xylene	ND	200	206	103	200	208	104	1	35-159/31
95-47-6	o-Xylene	ND	100	99.3	99	100	101	101	2	50-144/35
1330-20-7	Xylene (total)	ND	300	305	102	300	309	103	1	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA49027-3	Limits
17060-07-0	1,2-Dichloroethane-D4	104%	102%	114%	84-124%
2037-26-5	Toluene-D8	98%	97%	98%	83-115%
460-00-4	4-Bromofluorobenzene	100%	100%	96%	89-111%

(a) Advisory control limits.

* = Outside of Control Limits.