



Element Materials Technology Lafayette
2417 W. Pinhook Road
Lafayette, LA 70508-3344
TEL: (337) 235-0483 FAX: (337) 233-6540
Website: www.element.com

April 29, 2019

Greg Miller
ICON Environmental Services
2049 Commercial Drive
Port Allen, LA 70767
TEL: (225) 344-8490
FAX: (225) 344-6654

RE: Desoto Mason/9077-243-0100

Order No.: 19040633

Dear Greg Miller:

Element Materials Technology Lafayette received 3 sample(s) on 4/11/2019 for the analyses presented in the following report.

In accordance with your instructions Element Lafayette conducted the analysis shown on the following pages on samples submitted by your company. The results related only to the items tested. Unless otherwise noted, all analyses were conducted using EPA approved methodologies and all test results meet all requirements of TNI. All relevant sampling information is on the attached Chain-of-Custody form.

All soil data, except for 29-B, are on a wet-weight basis unless otherwise indicated in the units field as -dry.

LELAP Certification No.: 01997. TCEQ Certification No.: T104704261. LDHH Certification No.: LA180028. ISDH Certification No.: C-LA-01. A scope of accredited parameters is available upon request. A "#" by the test method or analyte indicates this parameter is outside the scope of accreditation.

Estimated uncertainty is available upon request. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions regarding these test results, please feel free to call.

A handwritten signature in blue ink that reads 'Cristina Thibeaux'.

Cristina Thibeaux
Customer Service Supervisor
2417 W. Pinhook Road
Lafayette, LA 70508-3344



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Case Narrative

WO#: 19040633
Date: 4/29/2019

CLIENT: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

Unless specified by the client, a duplicate or MS/MSD, wherever applicable, is randomly selected and analyzed from each analytical batch provided sample volume is sufficient. The sample chosen for duplicate or MS/MSD may or may not be a sample submitted in this workorder. A method blank and/or a lab control sample (LCS)/lab control sample duplicate (LCSD), wherever applicable, are processed as a quality control check for each analytical batch. When the matrix QC data is not available due to insufficient sample volume or when the results indicate possible matrix effect, the validity of the batch is determined by the method blank and LCS/LCSD.

The results of the laboratory internal quality control data are provided in the QC Summary Report section of the report for your review. Laboratory-related QC exceptions that may impact the validity of data are discussed in the case narrative. Sample-related QC exceptions are flagged either in the results page(s) or in the QC report page(s). End users should consider QC exceptions when evaluating sample data against data quality objectives.

Any other exceptions associated with this report will be footnoted in the results page(s) or the QC summary page(s).



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Analytical Report

(consolidated)

WO#: 19040633

Date Reported: 4/29/2019

CLIENT: ICON Environmental Services **Collection Date:** 4/11/2019 10:40:00 AM
Project: Desoto Mason/9077-243-0100
Lab ID: 19040633-001 **Matrix:** AQUEOUS
Client Sample ID PDW(031-9843Z)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
TPH-D/O IN WATER BY SW8015						
TPH DRO/ORO IN WATER BY SW8015						
TPH (Diesel Range)	< 0.141	0.141		mg/L	1	4/17/2019 9:03:00 PM
TPH (Oil Range)	< 0.130	0.130		mg/L	1	4/17/2019 9:03:00 PM
Surr: 4-Terphenyl-d14	88.0	51.4 - 146		%Rec	1	4/17/2019 9:03:00 PM
BTEX/TPH-G IN WATER BY SW8021/8015						
TPH-GRO IN WATER BY SW8015						
TPH (Gasoline Range)	< 0.150	0.150		mg/L	1	4/12/2019 10:44:00 PM
Surr: alpha, alpha, alpha-Trifluorotoluene	97.8	70 - 130		%Rec	1	4/12/2019 10:44:00 PM
BTEX/TPH-G IN WATER BY SW8021/8015						
BTEX IN WATER BY SW8021						
Benzene	< 0.00500	0.00500		mg/L	1	4/12/2019 10:44:00 PM
Ethylbenzene	< 0.00500	0.00500		mg/L	1	4/12/2019 10:44:00 PM
Toluene	< 0.0100	0.0100		mg/L	1	4/12/2019 10:44:00 PM
Xylenes, Total	< 0.0500	0.0500		mg/L	1	4/12/2019 10:44:00 PM
Surr: alpha, alpha, alpha-Trifluorotoluene	92.0	70 - 130		%Rec	1	4/12/2019 10:44:00 PM
MERCURY IN GROUND WATER, TOTAL						
Mercury	< 0.000200	0.000200		mg/L	1	4/16/2019 11:33:13 AM
INORGANIC ANIONS IN WATER BY IC						
Chloride	48.2	5.00		mg/L	20	4/16/2019 1:50:42 PM
Sulfate	45.3	5.00		mg/L	20	4/16/2019 1:50:42 PM
METALS IN WATER BY ICP, TOTALS						
Arsenic	< 0.0100	0.0100		mg/L	1	4/23/2019 8:59:14 PM
Barium	0.0707	0.0100		mg/L	1	4/23/2019 8:59:14 PM
Cadmium	< 0.00500	0.00500		mg/L	1	4/23/2019 8:59:14 PM
Calcium	6.45	0.500		mg/L	1	4/23/2019 8:59:14 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded
	M	Matrix Interference	ND	Not Detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit
	S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit
	U	Analyte not detected	W	Sample container temperature is out of limit as specified at testcode



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Analytical Report

(consolidated)

WO#: 19040633

Date Reported: 4/29/2019

CLIENT: ICON Environmental Services **Collection Date:** 4/11/2019 10:40:00 AM
Project: Desoto Mason/9077-243-0100
Lab ID: 19040633-001 **Matrix:** AQUEOUS
Client Sample ID PDW(031-9843Z)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METALS IN WATER BY ICP, TOTALS				SW6010B		Analyst: STS
Chromium	< 0.0100	0.0100		mg/L	1	4/23/2019 8:59:14 PM
Iron	0.108	0.0100		mg/L	1	4/23/2019 8:59:14 PM
Lead	< 0.0100	0.0100		mg/L	1	4/23/2019 8:59:14 PM
Magnesium	1.96	0.500		mg/L	1	4/23/2019 8:59:14 PM
Manganese	0.0163	0.0100		mg/L	1	4/23/2019 8:59:14 PM
Potassium	< 5.00	5.00		mg/L	1	4/23/2019 8:59:14 PM
Sodium	148	10.0		mg/L	1	4/23/2019 8:59:14 PM
Strontium	0.397	0.0100		mg/L	1	4/23/2019 8:59:14 PM
Zinc	0.0673	0.0100		mg/L	1	4/23/2019 8:59:14 PM
ALKALINITY; TOTAL, CARB, BICARB				SM2320 B		Analyst: BXB
Alkalinity, Bicarbonate (As CaCO3)	207	20.0		mgCaCO3/L	2	4/24/2019 6:30:00 AM
Alkalinity, Carbonate (As CaCO3)	< 20.0	20.0		mgCaCO3/L	2	4/24/2019 6:30:00 AM
Alkalinity, Total (As CaCO3)	219	20.0		mgCaCO3/L	2	4/24/2019 6:30:00 AM
TOTAL DISSOLVED SOLIDS				SM2540C		Analyst: SD
Total Dissolved Solids (Residue, Filterable)	423	20.0		mg/L	1	4/15/2019 8:55:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded
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WO#: 19040633

Date Reported: 4/29/2019

CLIENT: ICON Environmental Services **Collection Date:** 4/11/2019 11:40:00 AM
Project: Desoto Mason/9077-243-0100
Lab ID: 19040633-002 **Matrix:** AQUEOUS
Client Sample ID Bessie McMichael(031-835)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
TPH-D/O IN WATER BY SW8015					SW8015B	Analyst: AB
TPH DRO/ORO IN WATER BY SW8015					SW3511	
TPH (Diesel Range)	< 0.140	0.140		mg/L	1	4/20/2019 2:15:00 AM
TPH (Oil Range)	< 0.129	0.129		mg/L	1	4/20/2019 2:15:00 AM
Surr: 4-Terphenyl-d14	5.08	51.4 - 146	SM*	%Rec	1	4/20/2019 2:15:00 AM
NOTES:						
SM*: Surrogate outside of control limits. Re-extraction and/or analysis yielded the same result, indicating a matrix effect.						
BTEX/TPH-G IN WATER BY SW8021/8015					SW8015B	Analyst: AB
TPH-GRO IN WATER BY SW8015						
TPH (Gasoline Range)	0.271	0.150		mg/L	1	4/15/2019 8:31:00 PM
Surr: alpha, alpha, alpha-Trifluorotoluene	97.8	70 - 130		%Rec	1	4/15/2019 8:31:00 PM
BTEX/TPH-G IN WATER BY SW8021/8015					SW8021B	Analyst: AB
BTEX IN WATER BY SW8021						
Benzene	0.0941	0.00500		mg/L	1	4/12/2019 11:11:00 PM
Ethylbenzene	< 0.00500	0.00500		mg/L	1	4/12/2019 11:11:00 PM
Toluene	0.0658	0.0100		mg/L	1	4/12/2019 11:11:00 PM
Xylenes, Total	< 0.0500	0.0500		mg/L	1	4/12/2019 11:11:00 PM
Surr: alpha, alpha, alpha-Trifluorotoluene	98.2	70 - 130		%Rec	1	4/12/2019 11:11:00 PM
MERCURY IN GROUND WATER, DISSOLVED					SW7470A	Analyst: AC
Mercury	< 0.000200	0.000200		mg/L	1	4/24/2019 2:06:02 PM
INORGANIC ANIONS IN WATER BY IC					SW9056A	Analyst: SGP
Chloride	31.2	12.5		mg/L	50	4/16/2019 2:04:26 PM
Sulfate	22.3	12.5		mg/L	50	4/16/2019 2:04:26 PM
METALS IN WATER BY ICP, DISSOLVED					SW6010B	Analyst: STS
Arsenic	0.0337	0.0100		mg/L	1	4/23/2019 8:06:49 PM
Barium	0.151	0.0100		mg/L	1	4/23/2019 8:06:49 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded
	M	Matrix Interference	ND	Not Detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit
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Date Reported: 4/29/2019

CLIENT: ICON Environmental Services **Collection Date:** 4/11/2019 11:40:00 AM
Project: Desoto Mason/9077-243-0100
Lab ID: 19040633-002 **Matrix:** AQUEOUS
Client Sample ID Bessie McMichael(031-835)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METALS IN WATER BY ICP, DISSOLVED				SW6010B		Analyst: STS
Cadmium	< 0.00500	0.00500		mg/L	1	4/23/2019 8:06:49 PM
Calcium	5.99	0.500		mg/L	1	4/23/2019 8:06:49 PM
Chromium	< 0.0100	0.0100		mg/L	1	4/23/2019 8:06:49 PM
Iron	0.0411	0.0100		mg/L	1	4/23/2019 8:06:49 PM
Lead	< 0.0100	0.0100		mg/L	1	4/23/2019 8:06:49 PM
Magnesium	1.38	0.500		mg/L	1	4/23/2019 8:06:49 PM
Manganese	0.0534	0.0100		mg/L	1	4/23/2019 8:06:49 PM
Potassium	< 5.00	5.00		mg/L	1	4/23/2019 8:06:49 PM
Sodium	330	10.0		mg/L	1	4/23/2019 8:06:49 PM
Strontium	0.346	0.0100		mg/L	1	4/23/2019 8:06:49 PM
Zinc	< 0.0100	0.0100		mg/L	1	4/23/2019 8:06:49 PM
ALKALINITY; TOTAL, CARB, BICARB				SM2320 B		Analyst: BXB
Alkalinity, Bicarbonate (As CaCO3)	571	20.0		mgCaCO3/L	2	4/24/2019 6:30:00 AM
Alkalinity, Carbonate (As CaCO3)	< 20.0	20.0		mgCaCO3/L	2	4/24/2019 6:30:00 AM
Alkalinity, Total (As CaCO3)	571	20.0		mgCaCO3/L	2	4/24/2019 6:30:00 AM
TOTAL DISSOLVED SOLIDS				SM2540C		Analyst: SD
Total Dissolved Solids (Residue, Filterable)	845	100		mg/L	5	4/15/2019 8:55:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded
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WO#: 19040633

Date Reported: 4/29/2019

CLIENT: ICON Environmental Services **Collection Date:** 4/11/2019 12:30:00 PM
Project: Desoto Mason/9077-243-0100
Lab ID: 19040633-003 **Matrix:** AQUEOUS
Client Sample ID Ardis Martin Relief Well SN 152-126

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
TPH-D/O IN WATER BY SW8015						
TPH DRO/ORO IN WATER BY SW8015						
TPH (Diesel Range)	< 0.135	0.135		mg/L	1	4/17/2019 10:03:00 PM
TPH (Oil Range)	< 0.125	0.125		mg/L	1	4/17/2019 10:03:00 PM
Surr: 4-Terphenyl-d14	80.3	51.4 - 146		%Rec	1	4/17/2019 10:03:00 PM
BTEX/TPH-G IN WATER BY SW8021/8015						
TPH-GRO IN WATER BY SW8015						
TPH (Gasoline Range)	0.242	0.150		mg/L	1	4/15/2019 10:19:00 PM
Surr: alpha, alpha, alpha-Trifluorotoluene	95.0	70 - 130		%Rec	1	4/15/2019 10:19:00 PM
BTEX/TPH-G IN WATER BY SW8021/8015						
BTEX IN WATER BY SW8021						
Benzene	0.0788	0.00500		mg/L	1	4/12/2019 11:38:00 PM
Ethylbenzene	< 0.00500	0.00500		mg/L	1	4/12/2019 11:38:00 PM
Toluene	0.0522	0.0100		mg/L	1	4/12/2019 11:38:00 PM
Xylenes, Total	< 0.0500	0.0500		mg/L	1	4/12/2019 11:38:00 PM
Surr: alpha, alpha, alpha-Trifluorotoluene	89.0	70 - 130		%Rec	1	4/12/2019 11:38:00 PM
MERCURY IN GROUND WATER, DISSOLVED						
Mercury	< 0.000200	0.000200		mg/L	1	4/24/2019 2:08:22 PM
INORGANIC ANIONS IN WATER BY IC						
Chloride	72.0	12.5		mg/L	50	4/16/2019 4:49:08 PM
Sulfate	< 0.250	0.250		mg/L	1	4/16/2019 4:07:56 PM
METALS IN WATER BY ICP, DISSOLVED						
Arsenic	0.0215	0.0100		mg/L	1	4/23/2019 8:29:53 PM
Barium	0.0407	0.0100		mg/L	1	4/23/2019 8:29:53 PM
Cadmium	< 0.00500	0.00500		mg/L	1	4/23/2019 8:29:53 PM
Calcium	3.15	0.500		mg/L	1	4/23/2019 8:29:53 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded
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Analytical Report

(consolidated)

WO#: 19040633

Date Reported: 4/29/2019

CLIENT: ICON Environmental Services **Collection Date:** 4/11/2019 12:30:00 PM
Project: Desoto Mason/9077-243-0100
Lab ID: 19040633-003 **Matrix:** AQUEOUS
Client Sample ID Ardis Martin Relief Well SN 152-126

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METALS IN WATER BY ICP, DISSOLVED				SW6010B		Analyst: STS
Chromium	< 0.0100	0.0100		mg/L	1	4/23/2019 8:29:53 PM
Iron	0.148	0.0100		mg/L	1	4/23/2019 8:29:53 PM
Lead	< 0.0100	0.0100		mg/L	1	4/23/2019 8:29:53 PM
Magnesium	< 0.500	0.500		mg/L	1	4/23/2019 8:29:53 PM
Manganese	0.0288	0.0100		mg/L	1	4/23/2019 8:29:53 PM
Potassium	< 5.00	5.00		mg/L	1	4/23/2019 8:29:53 PM
Sodium	365	10.0		mg/L	1	4/23/2019 8:29:53 PM
Strontium	0.127	0.0100		mg/L	1	4/23/2019 8:29:53 PM
Zinc	< 0.0100	0.0100		mg/L	1	4/23/2019 8:29:53 PM
ALKALINITY; TOTAL, CARB, BICARB				SM2320 B		Analyst: BXB
Alkalinity, Bicarbonate (As CaCO3)	713	20.0		mgCaCO3/L	2	4/24/2019 6:30:00 AM
Alkalinity, Carbonate (As CaCO3)	< 20.0	20.0		mgCaCO3/L	2	4/24/2019 6:30:00 AM
Alkalinity, Total (As CaCO3)	713	20.0		mgCaCO3/L	2	4/24/2019 6:30:00 AM
TOTAL DISSOLVED SOLIDS				SM2540C		Analyst: SD
Total Dissolved Solids (Residue, Filterable)	820	100		mg/L	5	4/15/2019 8:55:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded
	M	Matrix Interference	ND	Not Detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit
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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: 29761

Sample ID: MB-29761	SampType: MBLK	TestCode: HG_W_7470A	Units: mg/L	Prep Date: 4/15/2019	RunNo: 77635
Client ID: PBW	Batch ID: 29761	TestNo: SW7470A	Analysis Date: 4/16/2019	SeqNo: 1945398	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	< 0.000200	0.000200			

Sample ID: LCS-29761	SampType: LCS	TestCode: HG_W_7470A	Units: mg/L	Prep Date: 4/15/2019	RunNo: 77635
Client ID: LCSW	Batch ID: 29761	TestNo: SW7470A	Analysis Date: 4/16/2019	SeqNo: 1945399	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.0105	0.000200	0.01000	0	105 80 120

Sample ID: LCSD-29761	SampType: LCSD	TestCode: HG_W_7470A	Units: mg/L	Prep Date: 4/15/2019	RunNo: 77635
Client ID: LCSS02	Batch ID: 29761	TestNo: SW7470A	Analysis Date: 4/16/2019	SeqNo: 1945400	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.0102	0.000200	0.01000	0	102 80 120 0.01050 3.00 20

Sample ID: 19040496-001DMS	SampType: MS	TestCode: HG_W_7470A	Units: mg/L	Prep Date: 4/15/2019	RunNo: 77635
Client ID: ZZZZZZ	Batch ID: 29761	TestNo: SW7470A	Analysis Date: 4/16/2019	SeqNo: 1945402	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.0100	0.000200	0.01000	0	100 75 125

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: 29761

Sample ID: 19040496-001DMSD	SampType: MSD	TestCode: HG_W_7470A	Units: mg/L	Prep Date: 4/15/2019	RunNo: 77635						
Client ID: ZZZZZZ	Batch ID: 29761	TestNo: SW7470A		Analysis Date: 4/16/2019	SeqNo: 1945403						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0101	0.000200	0.01000	0	101	75	125	0.01002	0.533	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: 29778

Sample ID: LCS-D29778	SampType: LCS	TestCode: 8015_DO_W_	Units: mg/L	Prep Date: 4/16/2019	RunNo: 77703						
Client ID: LCSW	Batch ID: 29778	TestNo: SW8015B	SW3511	Analysis Date: 4/17/2019	SeqNo: 1947511						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Diesel Range)	1.76	0.136	1.791	0	98.3	70	130				
Surr: 4-Terphenyl-d14	0.0560		0.05968		93.8	51.4	146				

Sample ID: LCSD-D29778	SampType: LCSD	TestCode: 8015_DO_W_	Units: mg/L	Prep Date: 4/16/2019	RunNo: 77703						
Client ID: LCSS02	Batch ID: 29778	TestNo: SW8015B	SW3511	Analysis Date: 4/17/2019	SeqNo: 1947512						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Diesel Range)	2.02	0.136	1.799	0	112	70	130	1.761	13.5	14.1
Surr: 4-Terphenyl-d14	0.0570		0.05997		95.0	51.4	146		0	40

Sample ID: LCSD-M29778	SampType: LCSD	TestCode: 8015_DO_W_	Units: mg/L	Prep Date: 4/16/2019	RunNo: 77703						
Client ID: LCSS02	Batch ID: 29778	TestNo: SW8015B	SW3511	Analysis Date: 4/17/2019	SeqNo: 1947513						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Oil Range)	1.89	0.124	1.778	0	106	70	130	1.691	11.0	23.2
Surr: 4-Terphenyl-d14	0.0535		0.05926		90.3	51.4	146		0	40

Sample ID: LCS-M29778	SampType: LCS	TestCode: 8015_DO_W_	Units: mg/L	Prep Date: 4/16/2019	RunNo: 77703						
Client ID: LCSW	Batch ID: 29778	TestNo: SW8015B	SW3511	Analysis Date: 4/17/2019	SeqNo: 1947514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Oil Range)	1.69	0.127	1.810	0	93.4	70	130			
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Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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 Website: www.element.com

QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: 29778

Sample ID: LCS-M29778	SampType: LCS	TestCode: 8015_DO_W_	Units: mg/L	Prep Date: 4/16/2019	RunNo: 77703						
Client ID: LCSW	Batch ID: 29778	TestNo: SW8015B	SW3511	Analysis Date: 4/17/2019	SeqNo: 1947514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: 4-Terphenyl-d14 0.0559 0.06033 92.6 51.4 146

Sample ID: MB-29778	SampType: MBLK	TestCode: 8015_DO_W_	Units: mg/L	Prep Date: 4/16/2019	RunNo: 77703						
Client ID: PBW	Batch ID: 29778	TestNo: SW8015B	SW3511	Analysis Date: 4/17/2019	SeqNo: 1947515						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Diesel Range) < 0.136 0.136
 TPH (Oil Range) < 0.126 0.126
 Surr: 4-Terphenyl-d14 0.0524 0.05995 87.3 51.4 146

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: 29801

Sample ID: MB-29801	SampType: MBLK	TestCode: 6010_W	Units: mg/L	Prep Date: 4/18/2019	RunNo: 77826						
Client ID: PBW	Batch ID: 29801	TestNo: SW6010B		Analysis Date: 4/23/2019	SeqNo: 1950713						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	< 0.0100	0.0100									
Barium	< 0.0100	0.0100									
Cadmium	< 0.00500	0.00500									
Calcium	< 0.500	0.500									
Chromium	< 0.0100	0.0100									
Iron	< 0.0100	0.0100									
Lead	< 0.0100	0.0100									
Magnesium	< 0.500	0.500									
Manganese	< 0.0100	0.0100									
Potassium	< 5.00	5.00									
Sodium	< 10.0	10.0									
Strontium	< 0.0100	0.0100									
Zinc	< 0.0100	0.0100									

Sample ID: LCS-29801	SampType: LCS	TestCode: 6010_W	Units: mg/L	Prep Date: 4/18/2019	RunNo: 77826						
Client ID: LCSW	Batch ID: 29801	TestNo: SW6010B		Analysis Date: 4/23/2019	SeqNo: 1950714						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	0.496	0.0100	0.5000	0	99.2	80	120				
Barium	0.495	0.0100	0.5000	0	99.0	80	120				
Cadmium	0.490	0.00500	0.5000	0	98.0	80	120				
Calcium	48.4	0.500	50.00	0	96.9	80	120				
Chromium	0.497	0.0100	0.5000	0	99.4	80	120				
Iron	0.494	0.0100	0.5000	0	98.8	80	120				
Lead	0.492	0.0100	0.5000	0	98.5	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633

29-Apr-19

Client: ICON Environmental Services

Project: Desoto Mason/9077-243-0100

BatchID: 29801

Sample ID: LCS-29801	SampType: LCS	TestCode: 6010_W	Units: mg/L	Prep Date: 4/18/2019	RunNo: 77826						
Client ID: LCSW	Batch ID: 29801	TestNo: SW6010B	Analysis Date: 4/23/2019	SeqNo: 1950714							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	48.7	0.500	50.00	0	97.4	80	120				
Manganese	0.495	0.0100	0.5000	0	99.1	80	120				
Potassium	47.9	5.00	50.00	0	95.9	80	120				
Sodium	50.0	10.0	50.00	0	100	80	120				
Strontium	0.497	0.0100	0.5000	0	99.4	80	120				
Zinc	0.496	0.0100	0.5000	0	99.2	80	120				

Sample ID: LCSD-29801	SampType: LCSD	TestCode: 6010_W	Units: mg/L	Prep Date: 4/18/2019	RunNo: 77826						
Client ID: LCSS02	Batch ID: 29801	TestNo: SW6010B	Analysis Date: 4/23/2019	SeqNo: 1950715							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.498	0.0100	0.5000	0	99.5	80	120	0.4958	0.382	20	
Barium	0.494	0.0100	0.5000	0	98.9	80	120	0.4948	0.0606	20	
Cadmium	0.490	0.00500	0.5000	0	98.1	80	120	0.4902	0.0408	20	
Calcium	48.3	0.500	50.00	0	96.6	80	120	48.45	0.289	20	
Chromium	0.496	0.0100	0.5000	0	99.3	80	120	0.4969	0.101	20	
Iron	0.492	0.0100	0.5000	0	98.5	80	120	0.4940	0.324	20	
Lead	0.489	0.0100	0.5000	0	97.7	80	120	0.4923	0.734	20	
Magnesium	48.6	0.500	50.00	0	97.1	80	120	48.70	0.308	20	
Manganese	0.494	0.0100	0.5000	0	98.8	80	120	0.4953	0.243	20	
Potassium	48.1	5.00	50.00	0	96.1	80	120	47.94	0.250	20	
Sodium	47.4	10.0	50.00	0	94.7	80	120	49.98	5.38	20	
Strontium	0.498	0.0100	0.5000	0	99.6	80	120	0.4970	0.181	20	
Zinc	0.492	0.0100	0.5000	0	98.4	80	120	0.4961	0.830	20	

Qualifiers:	B Analyte detected in the associated Method Blank	H Holding times for preparation or analysis exceeded	M Matrix Interference
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	RL Reporting Limit
	S Spike Recovery outside accepted recovery limits	SDL Sample detection limit	U Analyte not detected
	W Sample container temperature is out of limit as specified at testcode		



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: 29801

Sample ID:	19040633-001CMS	SampType:	MS	TestCode:	6010_W	Units:	mg/L	Prep Date:	4/18/2019	RunNo:	77826
Client ID:	PDW(031-9843Z)	Batch ID:	29801	TestNo:	SW6010B	Analysis Date:	4/23/2019	SeqNo:	1950718		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.523	0.0100	0.5000	0	105	75	125				
Barium	0.578	0.0100	0.5000	0.07070	101	75	125				
Cadmium	0.490	0.00500	0.5000	0	98.1	75	125				
Calcium	56.3	0.500	50.00	6.453	99.7	75	125				
Chromium	0.502	0.0100	0.5000	0	100	75	125				
Iron	0.618	0.0100	0.5000	0.1081	102	75	125				
Lead	0.491	0.0100	0.5000	0	98.1	75	125				
Magnesium	51.8	0.500	50.00	1.961	99.7	75	125				
Manganese	0.522	0.0100	0.5000	0.01630	101	75	125				
Potassium	52.7	5.00	50.00	2.740	99.9	75	125				
Sodium	203	10.0	50.00	147.7	110	75	125				
Strontium	0.913	0.0100	0.5000	0.3970	103	75	125				
Zinc	0.556	0.0100	0.5000	0.06730	97.7	75	125				

Sample ID:	19040633-001CMSD	SampType:	MSD	TestCode:	6010_W	Units:	mg/L	Prep Date:	4/18/2019	RunNo:	77826
Client ID:	PDW(031-9843Z)	Batch ID:	29801	TestNo:	SW6010B	Analysis Date:	4/23/2019	SeqNo:	1950718		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.528	0.0100	0.5000	0	106	75	125	0.5228	1.03	20	
Barium	0.581	0.0100	0.5000	0.07070	102	75	125	0.5781	0.552	20	
Cadmium	0.492	0.00500	0.5000	0	98.4	75	125	0.4904	0.305	20	
Calcium	56.6	0.500	50.00	6.453	100	75	125	56.32	0.408	20	
Chromium	0.504	0.0100	0.5000	0	101	75	125	0.5020	0.338	20	
Iron	0.624	0.0100	0.5000	0.1081	103	75	125	0.6183	0.837	20	
Lead	0.493	0.0100	0.5000	0	98.5	75	125	0.4907	0.407	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: 29801

Sample ID: 19040633-001CMSD	SampType: MSD	TestCode: 6010_W	Units: mg/L	Prep Date: 4/18/2019	RunNo: 77826						
Client ID: PDW(031-9843Z)	Batch ID: 29801	TestNo: SW6010B	Analysis Date: 4/23/2019	SeqNo: 1950719							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	52.0	0.500	50.00	1.961	100	75	125	51.80	0.481	20	
Manganese	0.523	0.0100	0.5000	0.01630	101	75	125	0.5216	0.325	20	
Potassium	53.5	5.00	50.00	2.740	102	75	125	52.71	1.47	20	
Sodium	204	10.0	50.00	147.7	113	75	125	202.6	0.738	20	
Strontium	0.921	0.0100	0.5000	0.3970	105	75	125	0.9127	0.862	20	
Zinc	0.559	0.0100	0.5000	0.06730	98.3	75	125	0.5556	0.592	20	

Qualifiers:	B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
	S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: 29873

Sample ID: MB-29873	SampType: MBLK	TestCode: HG_D_7470A	Units: mg/L	Prep Date: 4/24/2019	RunNo: 77843
Client ID: PBW	Batch ID: 29873	TestNo: SW7470A	Analysis Date: 4/24/2019	SeqNo: 1951363	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Mercury < 0.000200 0.000200

Sample ID: LCS-29873	SampType: LCS	TestCode: HG_D_7470A	Units: mg/L	Prep Date: 4/24/2019	RunNo: 77843
Client ID: LCSW	Batch ID: 29873	TestNo: SW7470A	Analysis Date: 4/24/2019	SeqNo: 1951364	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Mercury 0.0108 0.000200 0.01000 0 108 80 120

Sample ID: LCSD-29873	SampType: LCSD	TestCode: HG_D_7470A	Units: mg/L	Prep Date: 4/24/2019	RunNo: 77843
Client ID: LCSS02	Batch ID: 29873	TestNo: SW7470A	Analysis Date: 4/24/2019	SeqNo: 1951365	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Mercury 0.0105 0.000200 0.01000 0 105 80 120 0.01078 2.35 20

Sample ID: 19040558-001EMS	SampType: MS	TestCode: HG_D_7470A	Units: mg/L	Prep Date: 4/24/2019	RunNo: 77843
Client ID: ZZZZZZ	Batch ID: 29873	TestNo: SW7470A	Analysis Date: 4/24/2019	SeqNo: 1951369	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Mercury 0.00714 0.000200 0.01000 0 71.4 75 125 S

NOTES:

MS/MSD recoveries were outside of QC limits. PDS/PDSD recoveries were within the acceptance limits. The method is in control as indicated by the Lab Control Sample(s).

Qualifiers:	B Analyte detected in the associated Method Blank	H Holding times for preparation or analysis exceeded	M Matrix Interference
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	RL Reporting Limit
	S Spike Recovery outside accepted recovery limits	SDL Sample detection limit	U Analyte not detected
	W Sample container temperature is out of limit as specified at testcode		



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: 29873

Sample ID: 19040558-001EMSD	SampType: MSD	TestCode: HG_D_7470A	Units: mg/L	Prep Date: 4/24/2019	RunNo: 77843						
Client ID: ZZZZZZ	Batch ID: 29873	TestNo: SW7470A		Analysis Date: 4/24/2019	SeqNo: 1951370						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00701	0.000200	0.01000	0	70.1	75	125	0.007139	1.87	20	S

Qualifiers:	B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
	S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
	W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77573

Sample ID: 19040731-005DUP	SampType: DUP	TestCode: TDS_2540C	Units: mg/L	Prep Date:	RunNo: 77573						
Client ID: ZZZZZZ	Batch ID: R77573	TestNo: SM2540C		Analysis Date: 4/15/2019	SeqNo: 1946794						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Dissolved Solids (Residue, Filterable)	3,350	200						2,840	16.5	10	R
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NOTES:
 R - High RPD due to suspected sample non-homogeneity. The method is in control as indicated by the LCS/LCSD.

Sample ID: MB-R77573	SampType: MBLK	TestCode: TDS_2540C	Units: mg/L	Prep Date:	RunNo: 77573						
Client ID: PBW	Batch ID: R77573	TestNo: SM2540C		Analysis Date: 4/15/2019	SeqNo: 1946796						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Dissolved Solids (Residue, Filterable)	< 20.0	20.0									
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Sample ID: LCS-R77573	SampType: LCS	TestCode: TDS_2540C	Units: mg/L	Prep Date:	RunNo: 77573						
Client ID: LCSW	Batch ID: R77573	TestNo: SM2540C		Analysis Date: 4/15/2019	SeqNo: 1946797						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Dissolved Solids (Residue, Filterable)	953	20.0	1,000	0	95.3	85	115				
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Sample ID: LCSD-R77573	SampType: LCSD	TestCode: TDS_2540C	Units: mg/L	Prep Date:	RunNo: 77573						
Client ID: LCSS02	Batch ID: R77573	TestNo: SM2540C		Analysis Date: 4/15/2019	SeqNo: 1946798						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77573

Sample ID: LCSD-R77573	SampType: LCSD	TestCode: TDS_2540C	Units: mg/L	Prep Date:	RunNo: 77573						
Client ID: LCSS02	Batch ID: R77573	TestNo: SM2540C		Analysis Date: 4/15/2019	SeqNo: 1946798						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Dissolved Solids (Residue, Filterable)	965	20.0	1,000	0	96.5	85	115	953.0	1.25	10
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Sample ID: 19040731-001DUP	SampType: DUP	TestCode: TDS_2540C	Units: mg/L	Prep Date:	RunNo: 77573						
Client ID: ZZZZZZ	Batch ID: R77573	TestNo: SM2540C		Analysis Date: 4/15/2019	SeqNo: 1946815						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Dissolved Solids (Residue, Filterable)	3,500	200						3,230	8.02	10
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Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77579

Sample ID: 19040556-001AMS	SampType: MS	TestCode: 8021_BTEX_	Units: mg/L	Prep Date:	RunNo: 77579						
Client ID: ZZZZZ	Batch ID: R77579	TestNo: SW8021B	Analysis Date: 4/12/2019	SeqNo: 1943940							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.41	0.100	1.000	1.494	91.6	26	161				
Ethylbenzene	1.98	0.100	1.000	1.036	94.6	66	153				
Toluene	0.916	0.200	1.000	0.05800	85.8	68	141				
Xylenes, Total	3.12	1.00	3.000	0.04000	103	48	154				
Surr: alpha, alpha, alpha-Trifluorotoluene	0.930		1.000		93.0	70	130				

Sample ID: 19040556-001AMSD	SampType: MSD	TestCode: 8021_BTEX_	Units: mg/L	Prep Date:	RunNo: 77579						
Client ID: ZZZZZ	Batch ID: R77579	TestNo: SW8021B	Analysis Date: 4/12/2019	SeqNo: 1943941							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.47	0.100	1.000	1.494	97.6	26	161	2.410	2.46	20	
Ethylbenzene	2.04	0.100	1.000	1.036	100	66	153	1.982	2.79	20	
Toluene	0.928	0.200	1.000	0.05800	87.0	68	141	0.9160	1.30	20	
Xylenes, Total	3.16	1.00	3.000	0.04000	104	48	154	3.122	1.08	20	
Surr: alpha, alpha, alpha-Trifluorotoluene	0.930		1.000		93.0	70	130		0	20	

Sample ID: BTEX LCS	SampType: LCS	TestCode: 8021_BTEX_	Units: mg/L	Prep Date:	RunNo: 77579						
Client ID: LCSW	Batch ID: R77579	TestNo: SW8021B	Analysis Date: 4/12/2019	SeqNo: 1943951							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.0441	0.00500	0.05000	0	88.2	72	120				
Ethylbenzene	0.0450	0.00500	0.05000	0	90.0	76	129				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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 Website: www.element.com

QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77579

Sample ID: BTEX LCS	SampType: LCS	TestCode: 8021_BTEX_	Units: mg/L	Prep Date:	RunNo: 77579						
Client ID: LCSW	Batch ID: R77579	TestNo: SW8021B	Analysis Date: 4/12/2019	SeqNo: 1943951							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	0.0456	0.0100	0.05000	0	91.2	78	120				
Xylenes, Total	0.136	0.0500	0.1500	0	90.6	75	125				
Surr: alpha, alpha, alpha-Trifluorotoluene	0.0463		0.05000		92.6	70	130				

Sample ID: BTEX LCSD	SampType: LCSD	TestCode: 8021_BTEX_	Units: mg/L	Prep Date:	RunNo: 77579						
Client ID: LCSS02	Batch ID: R77579	TestNo: SW8021B	Analysis Date: 4/12/2019	SeqNo: 1943952							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.0430	0.00500	0.05000	0	86.0	72	120	0.04410	2.53	20	
Ethylbenzene	0.0428	0.00500	0.05000	0	85.6	76	129	0.04500	5.01	20	
Toluene	0.0440	0.0100	0.05000	0	88.0	78	120	0.04560	3.57	20	
Xylenes, Total	0.131	0.0500	0.1500	0	87.6	75	125	0.1359	3.37	20	
Surr: alpha, alpha, alpha-Trifluorotoluene	0.0461		0.05000		92.2	70	130		0	20	

Sample ID: MBLK	SampType: MBLK	TestCode: 8021_BTEX_	Units: mg/L	Prep Date:	RunNo: 77579						
Client ID: PBW	Batch ID: R77579	TestNo: SW8021B	Analysis Date: 4/12/2019	SeqNo: 1943953							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	< 0.00500	0.00500									
Ethylbenzene	< 0.00500	0.00500									
Toluene	< 0.0100	0.0100									
Xylenes, Total	< 0.0500	0.0500									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77579

Sample ID: MBLK	SampType: MBLK	TestCode: 8021_BTEX_	Units: mg/L	Prep Date:	RunNo: 77579						
Client ID: PBW	Batch ID: R77579	TestNo: SW8021B		Analysis Date: 4/12/2019	SeqNo: 1943953						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: alpha, alpha, alpha-Trifluorotoluene	0.0464		0.05000		92.8	70	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77580

Sample ID: MBLK	SampType: MBLK	TestCode: 8015_G_W	Units: mg/L	Prep Date:	RunNo: 77580						
Client ID: PBW	Batch ID: R77580	TestNo: SW8015B		Analysis Date: 4/12/2019	SeqNo: 1943960						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline Range)	< 0.150	0.150									
Surr: alpha, alpha, alpha-Trifluorotoluene	0.0458		0.05000		91.6	70	130				

Sample ID: GAS LCS	SampType: LCS	TestCode: 8015_G_W	Units: mg/L	Prep Date:	RunNo: 77580						
Client ID: LCSW	Batch ID: R77580	TestNo: SW8015B		Analysis Date: 4/12/2019	SeqNo: 1943961						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline Range)	13.7	0.150	12.50	0	109	80	130				
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Sample ID: GAS LCSD	SampType: LCSD	TestCode: 8015_G_W	Units: mg/L	Prep Date:	RunNo: 77580						
Client ID: LCSS02	Batch ID: R77580	TestNo: SW8015B		Analysis Date: 4/12/2019	SeqNo: 1943962						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline Range)	13.6	0.150	12.50	0	109	80	130	13.68	0.720	20	
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Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77617

Sample ID: GAS LCS	SampType: LCS	TestCode: 8015_G_W	Units: mg/L	Prep Date:	RunNo: 77617
Client ID: LCSW	Batch ID: R77617	TestNo: SW8015B	Analysis Date: 4/15/2019	SeqNo: 1944920	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

TPH (Gasoline Range) 13.1 0.150 12.50 0 105 80 130

Sample ID: GAS LCSD	SampType: LCSD	TestCode: 8015_G_W	Units: mg/L	Prep Date:	RunNo: 77617
Client ID: LCSS02	Batch ID: R77617	TestNo: SW8015B	Analysis Date: 4/15/2019	SeqNo: 1944921	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

TPH (Gasoline Range) 12.9 0.150 12.50 0 103 80 130 13.09 1.42 20

Sample ID: MB	SampType: MBLK	TestCode: 8015_G_W	Units: mg/L	Prep Date:	RunNo: 77617
Client ID: PBW	Batch ID: R77617	TestNo: SW8015B	Analysis Date: 4/15/2019	SeqNo: 1944922	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

TPH (Gasoline Range) < 0.150 0.150
 Surr: alpha, alpha, alpha-Trifluorotoluene 0.0487 0.05000 97.4 70 130

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded M Matrix Interference
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits RL Reporting Limit
 S Spike Recovery outside accepted recovery limits SDL Sample detection limit U Analyte not detected
 W Sample container temperature is out of limit as specified at testcode



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77625

Sample ID: MBLK	SampType: MBLK	TestCode: 9056_W	Units: mg/L	Prep Date:	RunNo: 77625						
Client ID: PBW	Batch ID: R77625	TestNo: SW9056A		Analysis Date: 4/16/2019	SeqNo: 1946008						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	< 0.250	0.250									
Sulfate	< 0.250	0.250									

Sample ID: LCS	SampType: LCS	TestCode: 9056_W	Units: mg/L	Prep Date:	RunNo: 77625						
Client ID: LCSW	Batch ID: R77625	TestNo: SW9056A		Analysis Date: 4/16/2019	SeqNo: 1946009						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	10.1	0.250	10.00	0	101	80	120				
Sulfate	9.86	0.250	10.00	0	98.6	80	120				

Sample ID: LCSD	SampType: LCSD	TestCode: 9056_W	Units: mg/L	Prep Date:	RunNo: 77625						
Client ID: LCSS02	Batch ID: R77625	TestNo: SW9056A		Analysis Date: 4/16/2019	SeqNo: 1946010						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	10.1	0.250	10.00	0	101	80	120	10.06	0.129	15	
Sulfate	9.98	0.250	10.00	0	99.8	80	120	9.857	1.24	15	

Sample ID: 19040558-005CMS	SampType: MS	TestCode: 9056_W	Units: mg/L	Prep Date:	RunNo: 77625						
Client ID: ZZZZZ	Batch ID: R77625	TestNo: SW9056A		Analysis Date: 4/16/2019	SeqNo: 1946017						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	4.94	0.250	5.000	0.06287	97.6	80	120				
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Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77625

Sample ID: 19040558-005CMS	SampType: MS	TestCode: 9056_W	Units: mg/L	Prep Date:	RunNo: 77625						
Client ID: ZZZZZZ	Batch ID: R77625	TestNo: SW9056A		Analysis Date: 4/16/2019	SeqNo: 1946017						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	5.33	0.250	5.000	0	107	80	120				
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Sample ID: 19040558-005CMSD	SampType: MSD	TestCode: 9056_W	Units: mg/L	Prep Date:	RunNo: 77625						
Client ID: ZZZZZZ	Batch ID: R77625	TestNo: SW9056A		Analysis Date: 4/16/2019	SeqNo: 1946018						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	4.97	0.250	5.000	0.06287	98.2	80	120	4.945	0.542	15
Sulfate	5.32	0.250	5.000	0	106	80	120	5.328	0.109	15

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77806

Sample ID: MB-R77806	SampType: MBLK	TestCode: ALK	Units: mgCaCO3/L	Prep Date:	RunNo: 77806						
Client ID: PBW	Batch ID: R77806	TestNo: SM2320 B		Analysis Date: 4/24/2019	SeqNo: 1950968						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Bicarbonate (As CaCO3)	< 10.0	10.0
Alkalinity, Carbonate (As CaCO3)	< 10.0	10.0
Alkalinity, Total (As CaCO3)	< 10.0	10.0

Sample ID: LCS-R77806	SampType: LCS	TestCode: ALK	Units: mgCaCO3/L	Prep Date:	RunNo: 77806						
Client ID: LCSW	Batch ID: R77806	TestNo: SM2320 B		Analysis Date: 4/24/2019	SeqNo: 1950969						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Total (As CaCO3)	55.5	10.0	50.00	0	111	80	120
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Sample ID: 19040558-001CDUP	SampType: DUP	TestCode: ALK	Units: mgCaCO3/L	Prep Date:	RunNo: 77806						
Client ID: ZZZZZ	Batch ID: R77806	TestNo: SM2320 B		Analysis Date: 4/24/2019	SeqNo: 1950971						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Bicarbonate (As CaCO3)	471	20.0						456.0	3.24	20
Alkalinity, Carbonate (As CaCO3)	< 20.0	20.0						0	0	20
Alkalinity, Total (As CaCO3)	471	20.0						456.0	3.24	20

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77826

Sample ID: MB	SampType: MBLK	TestCode: 6010-D	Units: mg/L	Prep Date:	RunNo: 77826						
Client ID: PBW	Batch ID: R77826	TestNo: SW6010B		Analysis Date: 4/23/2019	SeqNo: 1950694						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	< 0.0100	0.0100									
Barium	< 0.0100	0.0100									
Cadmium	< 0.00500	0.00500									
Calcium	< 0.500	0.500									
Chromium	< 0.0100	0.0100									
Iron	< 0.0100	0.0100									
Lead	< 0.0100	0.0100									
Magnesium	< 0.500	0.500									
Manganese	< 0.0100	0.0100									
Potassium	< 5.00	5.00									
Sodium	< 10.0	10.0									
Strontium	< 0.0100	0.0100									
Zinc	< 0.0100	0.0100									

Sample ID: LCS	SampType: LCS	TestCode: 6010-D	Units: mg/L	Prep Date:	RunNo: 77826						
Client ID: LCSW	Batch ID: R77826	TestNo: SW6010B		Analysis Date: 4/23/2019	SeqNo: 1950695						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	0.481	0.0100	0.5000	0	96.2	80	120				
Barium	0.487	0.0100	0.5000	0	97.3	80	120				
Cadmium	0.481	0.00500	0.5000	0	96.1	80	120				
Calcium	48.1	0.500	50.00	0	96.2	80	120				
Chromium	0.488	0.0100	0.5000	0	97.6	80	120				
Iron	0.482	0.0100	0.5000	0	96.3	80	120				
Lead	0.483	0.0100	0.5000	0	96.5	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77826

Sample ID: LCS	SampType: LCS	TestCode: 6010-D	Units: mg/L	Prep Date:	RunNo: 77826						
Client ID: LCSW	Batch ID: R77826	TestNo: SW6010B		Analysis Date: 4/23/2019	SeqNo: 1950695						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	48.2	0.500	50.00	0	96.4	80	120				
Manganese	0.485	0.0100	0.5000	0	97.0	80	120				
Potassium	47.9	5.00	50.00	0	95.8	80	120				
Sodium	48.6	10.0	50.00	0	97.3	80	120				
Strontium	0.493	0.0100	0.5000	0	98.6	80	120				
Zinc	0.482	0.0100	0.5000	0	96.3	80	120				

Sample ID: LCSD	SampType: LCSD	TestCode: 6010-D	Units: mg/L	Prep Date:	RunNo: 77826						
Client ID: LCSS02	Batch ID: R77826	TestNo: SW6010B		Analysis Date: 4/23/2019	SeqNo: 1950698						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.490	0.0100	0.5000	0	97.9	80	120	0.4809	1.81	20	
Barium	0.490	0.0100	0.5000	0	98.1	80	120	0.4866	0.757	20	
Cadmium	0.484	0.00500	0.5000	0	96.9	80	120	0.4806	0.767	20	
Calcium	48.5	0.500	50.00	0	96.9	80	120	48.08	0.787	20	
Chromium	0.490	0.0100	0.5000	0	98.1	80	120	0.4879	0.511	20	
Iron	0.489	0.0100	0.5000	0	97.8	80	120	0.4815	1.55	20	
Lead	0.484	0.0100	0.5000	0	96.8	80	120	0.4826	0.310	20	
Magnesium	48.6	0.500	50.00	0	97.2	80	120	48.20	0.785	20	
Manganese	0.489	0.0100	0.5000	0	97.8	80	120	0.4851	0.780	20	
Potassium	48.1	5.00	50.00	0	96.2	80	120	47.88	0.458	20	
Sodium	49.1	10.0	50.00	0	98.3	80	120	48.65	1.00	20	
Strontium	0.498	0.0100	0.5000	0	99.6	80	120	0.4932	0.928	20	
Zinc	0.486	0.0100	0.5000	0	97.1	80	120	0.4816	0.848	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



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QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77826

Sample ID:	19040633-002CMS	SampType:	MS	TestCode:	6010-D	Units:	mg/L	Prep Date:	RunNo: 77826			
Client ID:	Bessie McMichael(0)	Batch ID:	R77826	TestNo:	SW6010B			Analysis Date:	4/23/2019		SeqNo:	1950709
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Arsenic	0.540	0.0100	0.5000	0.03370	101	75	125					
Barium	0.637	0.0100	0.5000	0.1511	97.1	75	125					
Cadmium	0.484	0.00500	0.5000	0.001400	96.5	75	125					
Calcium	53.0	0.500	50.00	5.991	94.1	75	125					
Chromium	0.489	0.0100	0.5000	0	97.9	75	125					
Iron	0.534	0.0100	0.5000	0.04110	98.6	75	125					
Lead	0.479	0.0100	0.5000	0	95.8	75	125					
Magnesium	48.8	0.500	50.00	1.380	94.9	75	125					
Manganese	0.544	0.0100	0.5000	0.05340	98.2	75	125					
Potassium	54.0	5.00	50.00	4.978	98.0	75	125					
Sodium	367	10.0	50.00	329.9	73.4	75	125				S	
Strontium	0.818	0.0100	0.5000	0.3460	94.4	75	125					
Zinc	0.504	0.0100	0.5000	0	101	75	125					

Sample ID:	19040633-002CMSD	SampType:	MSD	TestCode:	6010-D	Units:	mg/L	Prep Date:	RunNo: 77826			
Client ID:	Bessie McMichael(0)	Batch ID:	R77826	TestNo:	SW6010B			Analysis Date:	4/23/2019		SeqNo:	1950710
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Arsenic	0.568	0.0100	0.5000	0.03370	107	75	125	0.5404	4.96	20		
Barium	0.633	0.0100	0.5000	0.1511	96.4	75	125	0.6366	0.520	20		
Cadmium	0.481	0.00500	0.5000	0.001400	96.0	75	125	0.4838	0.518	20		
Calcium	53.8	0.500	50.00	5.991	95.6	75	125	53.03	1.39	20		
Chromium	0.486	0.0100	0.5000	0	97.2	75	125	0.4893	0.636	20		
Iron	0.531	0.0100	0.5000	0.04110	98.0	75	125	0.5342	0.601	20		
Lead	0.479	0.0100	0.5000	0	95.8	75	125	0.4790	0.0209	20		

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
W	Sample container temperature is out of limit as specified at testcode				



Element Materials Technology Lafayette
 2417 W. Pinhook Road
 Lafayette, LA 70508-3344
 TEL: (337) 235-0483 FAX: (337) 233-6540
 Website: www.element.com

QC SUMMARY REPORT

WO#: 19040633
 29-Apr-19

Client: ICON Environmental Services
Project: Desoto Mason/9077-243-0100

BatchID: R77826

Sample ID: 19040633-002CMSD	SampType: MSD	TestCode: 6010-D	Units: mg/L	Prep Date:	RunNo: 77826						
Client ID: Bessie McMichael(0)	Batch ID: R77826	TestNo: SW6010B	Analysis Date: 4/23/2019	SeqNo: 1950710							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	49.5	0.500	50.00	1.380	96.2	75	125	48.84	1.28	20	
Manganese	0.542	0.0100	0.5000	0.05340	97.7	75	125	0.5445	0.516	20	
Potassium	54.6	5.00	50.00	4.978	99.3	75	125	53.96	1.22	20	
Sodium	369	10.0	50.00	329.9	78.2	75	125	366.6	0.653	20	
Strontium	0.823	0.0100	0.5000	0.3460	95.3	75	125	0.8180	0.561	20	
Zinc	0.500	0.0100	0.5000	0	99.9	75	125	0.5036	0.777	20	

NOTES:

S - Analyte concentration in native sample was too high for accurate spike recovery(ies). The method is in control as indicated by the laboratory control sample (LCS).

Qualifiers:	B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
	S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit	U	Analyte not detected
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Sample Log-In Check List

Client Name: **ICON_ENV**

Work Order Number: **19040633**

RcptNo: **1**

Logged by:	Tammy Thibodeaux	4/11/2019 4:30:00 PM	<i>Tammy Thibodeaux</i>
Completed By:	Tammy Thibodeaux	4/11/2019 4:43:18 PM	<i>Tammy Thibodeaux</i>
Reviewed By:	Cristina Thibeaux	4/22/2019 9:34:23 AM	<i>Cristina Thibeaux</i>

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes No NA
 4. Shipping container/cooler in good condition? Yes No
 Custody seals intact on shipping container/cooler? Yes No Not Present
 No. Seal Date: Signed By:
 5. Was an attempt made to cool the samples? Yes No NA
 6. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
 7. Sample(s) in proper container(s)? Yes No
 8. Sufficient sample volume for indicated test(s)? Yes No
 9. Are samples (except VOA and ONG) properly preserved? Yes No
 10. Was preservative added to bottles? Yes No NA
 11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes No No VOA Vials
 12. Were any sample containers received broken? Yes No
 13. Does paperwork match bottle labels? Yes No
 (Note discrepancies on chain of custody)
 14. Are matrices correctly identified on Chain of Custody? Yes No
 15. Is it clear what analyses were requested? Yes No
 16. Were all holding times able to be met? Yes No
 (If no, notify customer for authorization.)

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text" value="Tammy Thibodeaux"/>	Date:	<input type="text" value="4/11/2019"/>
By Whom:	<input type="text" value="Katie"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input checked="" type="checkbox"/> In Person
Regarding:	<input type="text" value="cancel the Field Blank analysis"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Not Present			



element

Chain of Custody

Laboratory Number: 19040633

Company Name: Contact Name: Address: City, State Zip: Phone Number: Fax Number: E-mail Address:	Client Information:	Billing Information:	PO Number:	Project Name/Number:	Page of
	Icon Enviromental	Same		Desoto Mason	Matrix Code
	Jason Sills		Quote Number:	9077-243-0100	DW = Drinking Water WW = Waste Water GW = Ground Water AQ = Aqueous OT = Other
	2049 Commerical Dr.		Required QC Level	Sampler's Signature <i>Kate</i>	SL = Sludge SOL = Solid O = Oil SO = Soil F = Food SW = Swab NG = Natural Gas NGL = Natural Gas Liquid PW = Produced Water CF = Completion Fluid
	Port Allen, La 70707		Bill Monthly	Shipping Method:	
225-344-8490 Ext:		<input type="checkbox"/> Yes <input type="checkbox"/> No	UPS / FedEx / Airborne DHL / Element / <u>Hand</u> / Mail		

Which Regulations Apply:	Turn Time	(Rush turn times will incur a surcharge and must be pre-approved by lab.)	Container		Pres.	Requested Tests							Comments		
			Quantity	Type P=Plastic, G=Glass, V=Vial		TDS	Cations/Anions	Chlorides	BTEXTPH_G	TPH-DO	Total Metals/Hg	Dissolved Metals			
<input type="checkbox"/> RCRA <input type="checkbox"/> POTW <input type="checkbox"/> NPDES <input type="checkbox"/> USDA/FDA <input type="checkbox"/> RECAP/RISC <input type="checkbox"/> Drinking Water <input type="checkbox"/> Distribution <input type="checkbox"/> Special <input type="checkbox"/> State <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Standard RUSH <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> Other				HCl, HNO ₃ , H ₂ SO ₄ , NaOH, Na ₂ S ₂ O ₃									Metals: As, Ba, Cd, Cr, Fe, Mn, Pb, Sr, Zn, Hg Cations: Na, Ca, K, Mg Anions: Alk Carbonate Alk Bicarbonate Sulfate	
Sample ID/Description		Collection Information			Quantity	Type	Pres.	TDS	Cations/Anions	Chlorides	BTEXTPH_G	TPH-DO	Total Metals/Hg	Dissolved Metals	
Date	Time	Grab / Composite	Matrix												
PDW (031-98437)	4.11.19	1040	G	AQ	7	PV	HCL/HNO3	X	X	X	X	X	X		
Bessie McMichael (031-835)	4.11.19	1140	G	AQ	7	PV	↓	X	X	X	X	X	X		
Ardis Martin Relief Well SN 152126	4.11.19	1230	G	AQ	7	PV	↓	X	X	X	X	X	X		
Field Blank	4.11.19	—	G	AQ	3	V	HCl				X				Cancel Per. Kate 4/11/19

	Relinquished by	Date/Time	Received by	Date/Time	Field Notes:
1	<i>Kate</i>	4.11.19 / 1430	<i>Pho deau</i>	24/11/19 1630	Received at lab on ice?
2					<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp: 1.2
3					

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.