P. O. Box 7192 (zip 71137-7192)
1000 Grimmett Dr.
Shreveport, LA 71107
Phone: (318) 222-2424
Fax: (318) 222-2425

November 20, 2018

Mr. Todd Emmert
Elm Springs, Inc.
P.O. Box 58
Shangaloo, LA 71072-0058

Re: LDNR-Residential Water Well Sampling Project
Mason Turner Water Well- Serial Number: 262
Section 27, Township 13 N, Range 15 W
GPS via hand held (Water Well): 32.09210, -93.89027

Dear Mr. Emmert:

Approach Environmental, LLC (Approach Environmental) was retained by Elm Springs, Inc. (Elm Springs) to conduct a Residential Water Well Sampling Project at the referenced location. On October 18, 2018, Approach Environmental split groundwater samples with ICON Environmental Services. Inc. (ICON) and Hydro-Environmental Technology, Inc. (HET) from the referenced water well to evaluate specific groundwater quality requested by the Louisiana Department of Natural Resources (LDNR). ICON was the lead consultant onsite and was responsible for landowner notifications and scheduling as well as water well purging and sampling procedures.

The residential water well sampling activities included photo documentation of the water well (photos attached), water well purging (if well was not used on a regular basis), obtaining GPS coordinates (via hand-held GPS), groundwater sampling, and preparation of a brief letter report presenting the analytical data, sampling procedures, and well conditions. According to LDNR SONRIS, the Mason Turner (LDNR serial number 262) water well has a recorded total depth of 250' below ground surface, is completed in the Wilcox formation and has no recorded depth to water on the registration form. The depth to water could not be measured during the sampling event due to an existing pump in the well. The well is constructed of 4-inch diameter PVC piping and was located in a small pump house, just South of Hwy 3015. The well was equipped with a valve, but the valve had a water hose attached to it that was not easily removeable. The sample was collected from the water house (approximately 10' south of the pump shed). The well was

purged of approximately 50 gallons of water since the owner stated this was the well water was used frequently. Once purged, the water sample was collected in laboratory supplied sample containers by an experienced Environmental Scientist wearing nitrile gloves and immediately placed on ice in an ice chest. Proper chain-of-custody procedures were followed and are documented with the attached laboratory report.

The sample was, then, delivered, via FedEx overnight, to Element Materials Technology, a LELAP Certification No.: 01997, a LDHH Certification No.: LA180028, and a ISDH Certification No.: C-LA-01 located in Lafayette, Louisiana. As requested by the LDNR, the sample was analyzed for Total Petroleum Hydrocarbons (TPH) Gasoline Range Organics (GRO), TPH Diesel Range Organics (DRO), TPH Oil Range Organics (ORO) by method SW8015, RCRA Metals by method SW6010/7470A, Inorganic Anions in water by IC method SW9056 (Chlorides), Polynuclear Aromatic Hydrocarbons (PAH) by EPA 8270C, Semi-Volatile Organic Compounds by method SW8270C, Volatile Organic Compounds (VOC) by method SW8260B, Total Dissolved Solids (TDS) by method SM2540C, and Dissolved Methane by EPA RSK-175.

A Google Earth map illustrating the location of the referenced residential water well, photographic documentation, and the analytical laboratory report are attached for review. Based on our review of the analytical data, the following parameters were detected within the respective method detection limits: TPH-GRO was detected at 0.0565 mg/l; Chlorides was detected at 9.90 mg/l; Arsenic was detected at 0.0118; Barium was detected at 0.0451; Cadmium was detected at 0.000800 mg/l; Sodium was detected at 19.3 mg/l; Bis(2-ethylhexyl) phthalate was detected at 0.00410 mg/l; and Methane was detected at 482 ug/l . No other parameters were detected above the respective method detection limits.

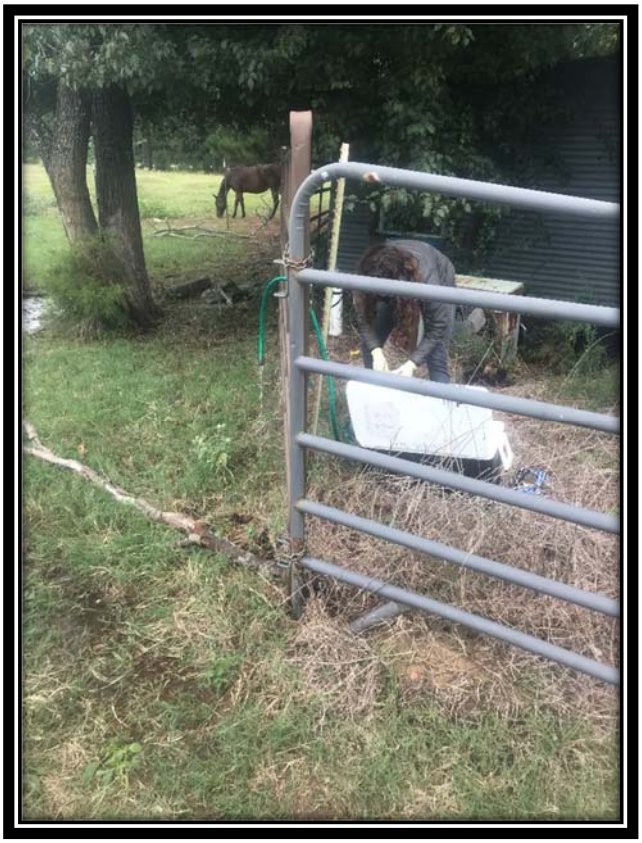
Should you have any questions and/or comments, please do not hesitate to contact me at (318) 222-2424.

Sincerely,

Mark S. Moore
Louisiana Professional Geoscientist (P.G. #490)
Approach Environmental, L.L.C.

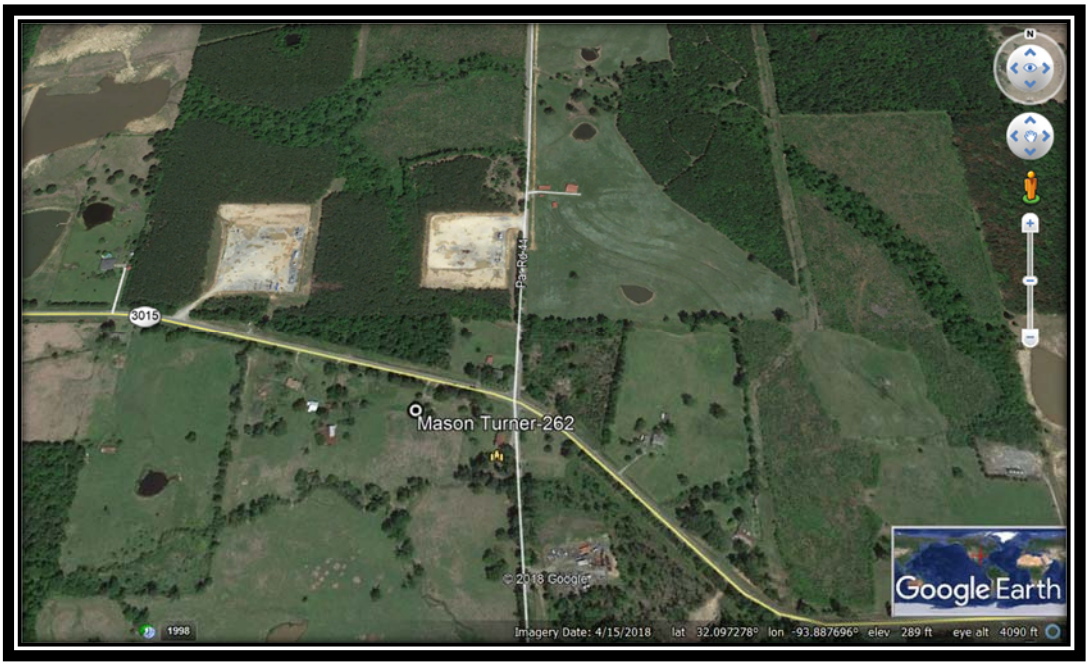
Encl./

Attachments Table of Contents



Water hose from which well was purged and sample collected

Zoomed in Google Earth Aerial Map of the Mason Turner-262 water well



Zoomed out Google Earth Aerial Map of the Mason Turner-262 water well

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

October 31, 2018

Mark Moore
Approach Environmental, LLC
151 Freestate Blvd.
Suite B
Shreveport, LA 71107
TEL: (318) 222-2424
FAX

Order No.: 18100762

RE: Approach Environmental - LDNR Residential Water Wells

Dear Mark Moore:

Element Materials Technology Lafayette received 3 sample(s) on 10/19/2018 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.

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

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Case Narrative

WO#: **18100762**
Date: **10/31/2018**

CLIENT: Approach Environmental, LLC
Project: Approach Environmental - LDNR Residential Water Wells

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).

The Dissolved Methane (RSK175) analyses were subcontracted to Gulf Coast Analytical Laboratories, Inc. Their report is attached in its entirety.

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Analytical Report

(consolidated MDL)

WO#: **18100762**

Date Reported: **10/31/2018**

CLIENT: Approach Environmental, LLC **Collection Date:** 10/18/2018 10:30:00 AM

Project: Approach Environmental - LDNR Residential Water Wells

Lab ID: 18100762-001 **Matrix:** WATER

Client Sample ID 262- Mason Turner

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TPH-D/O IN WATER BY SW8015					**SW8015B**	**SW3511**	Analyst: **CRM**
TPH DRO/ORO IN WATER BY SW8015							
TPH (Diesel Range)	< 0.135	0.00413	0.135		mg/L	1	10/19/2018 5:11:00 PM
TPH (Oil Range)	< 0.125	0.0494	0.125		mg/L	1	10/19/2018 5:11:00 PM
Surr: 4-Terphenyl-d14	97.8		51.4-146		%Rec	1	10/19/2018 5:11:00 PM
TPH-GRO IN WATER BY SW8015					**SW8015B**		Analyst: **CRM**
TPH (Gasoline Range)	0.0565	0.0149	0.150	J	mg/L	1	10/19/2018 12:13:00 PM
Surr: alpha, alpha, alpha-Trifluorotoluene	107		70-130		%Rec	1	10/19/2018 12:13:00 PM
RCRA METALS - SW6010/7470A					**SW7470A**	**SW7470A**	Analyst: **MRM**
MERCURY IN GROUND WATER,TOTAL							
Mercury	< 0.000200	0.0000540	0.000200		mg/L	1	10/22/2018 12:24:39 PM
INORGANIC ANIONS IN WATER BY IC					**SW9056A**		Analyst: **SGP**
Chloride	9.90	0.0332	0.500		mg/L	2	10/19/2018 3:38:59 PM
RCRA METALS - SW6010/7470A					**SW6010B**		Analyst: **STS**
METALS IN WATER BY ICP, TOTALS							
Arsenic	0.0118	0.00895	0.0100		mg/L	1	10/29/2018 9:23:42 PM
Barium	0.0451	0.00103	0.0100		mg/L	1	10/23/2018 2:58:52 PM
Cadmium	0.000800	0.000781	0.00500	J	mg/L	1	10/23/2018 2:58:52 PM
Chromium	< 0.0100	0.000483	0.0100		mg/L	1	10/23/2018 2:58:52 PM
Lead	< 0.0100	0.00488	0.0100		mg/L	1	10/23/2018 2:58:52 PM
Selenium	< 0.0200	0.00526	0.0200		mg/L	1	10/25/2018 2:33:28 PM
Silver	< 0.00500	0.000340	0.00500		mg/L	1	10/23/2018 2:58:52 PM
Sodium	19.3	2.32	5.00		mg/L	1	10/23/2018 2:58:52 PM
PAH IN WATER BY EPA 8270C					**SW8270C**	**SW3511**	Analyst: **CRM**
2-Methylnaphthalene	< 0.000521	0.0000196	0.000521		mg/L	1	10/20/2018 12:48:00 PM
Acenaphthene	< 0.00104	0.0000543	0.00104		mg/L	1	10/20/2018 12:48:00 PM
Acenaphthylene	< 0.00104	0.000117	0.00104		mg/L	1	10/20/2018 12:48:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
C	Value is below Minimum Compound Limit.	DF	Dilution Factor
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

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Analytical Report

(consolidated MDL)

WO#: **18100762**

Date Reported: **10/31/2018**

CLIENT: Approach Environmental, LLC **Collection Date:** 10/18/2018 10:30:00 AM

Project: Approach Environmental - LDNR Residential Water Wells

Lab ID: 18100762-001 **Matrix:** WATER

Client Sample ID 262- Mason Turner

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
PAH IN WATER BY EPA 8270C					**SW8270C**	**SW3511**	Analyst: **CRM**
Anthracene	< 0.00104	0.00000620	0.00104		mg/L	1	10/20/2018 12:48:00 PM
Benzo(a)anthracene	< 0.000521	0.0000253	0.000521		mg/L	1	10/20/2018 12:48:00 PM
Benzo(a)pyrene	< 0.000177	0.0000473	0.000177		mg/L	1	10/20/2018 12:48:00 PM
Benzo(b)fluoranthene	< 0.000521	0.0000445	0.000521		mg/L	1	10/20/2018 12:48:00 PM
Benzo(k)fluoranthene	< 0.000521	0.0000639	0.000521		mg/L	1	10/20/2018 12:48:00 PM
Chrysene	< 0.000521	0.0000251	0.000521		mg/L	1	10/20/2018 12:48:00 PM
Dibenz(a,h)anthracene	< 0.00104	0.0000535	0.00104		mg/L	1	10/20/2018 12:48:00 PM
Fluoranthene	< 0.00104	0.000000563	0.00104		mg/L	1	10/20/2018 12:48:00 PM
Fluorene	< 0.000625	0.0000241	0.000625		mg/L	1	10/20/2018 12:48:00 PM
Indeno(1,2,3-cd)pyrene	< 0.000521	0.000150	0.000521		mg/L	1	10/20/2018 12:48:00 PM
Naphthalene	< 0.00104	0.0000268	0.00104		mg/L	1	10/20/2018 12:48:00 PM
Phenanthrene	< 0.00104	0.00000310	0.00104		mg/L	1	10/20/2018 12:48:00 PM
Pyrene	< 0.00104	0.00000121	0.00104		mg/L	1	10/20/2018 12:48:00 PM
Surr: 4-Terphenyl-d14	86.6	0	49.2-161		%Rec	1	10/20/2018 12:48:00 PM
SEMIVOLATILE ORGANICS IN WATER					**SW8270C**	**E625/SW351**	Analyst: **CRM**
1,2,4,5-Tetrachlorobenzene	< 0.00102	0.000510	0.00102		mg/L	1	10/21/2018 2:42:00 PM
1,2,4-Trichlorobenzene	< 0.00510	0.00102	0.00510		mg/L	1	10/21/2018 2:42:00 PM
1,2-Dichlorobenzene	< 0.00510	0.00102	0.00510		mg/L	1	10/21/2018 2:42:00 PM
1,3-Dichlorobenzene	< 0.00510	0.000514	0.00510		mg/L	1	10/21/2018 2:42:00 PM
1,3-Dinitrobenzene	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
1,4-Dichlorobenzene	< 0.00510	0.00102	0.00510		mg/L	1	10/21/2018 2:42:00 PM
2,3,4,6-Tetrachlorophenol	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
2,4,5-Trichlorophenol	< 0.0102	0.000510	0.0102		mg/L	1	10/21/2018 2:42:00 PM
2,4,6-Trichlorophenol	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
2,4-Dichlorophenol	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
2,4-Dimethylphenol	< 0.00510	0.000567	0.00510		mg/L	1	10/21/2018 2:42:00 PM
2,4-Dinitrophenol	< 0.0204	0.00204	0.0204		mg/L	1	10/21/2018 2:42:00 PM
2,4-Dinitrotoluene	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
2,6-Dinitrotoluene	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
2-Chloronaphthalene	< 0.00510	0.0000627	0.00510		mg/L	1	10/21/2018 2:42:00 PM
2-Chlorophenol	< 0.00510	0.0000550	0.00510		mg/L	1	10/21/2018 2:42:00 PM
2-Nitroaniline	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM

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C	Value is below Minimum Compound Limit.	DF	Dilution Factor
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

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Lafayette, LA 70508-3344
TEL: (337) 235-0483 FAX: (337) 233-6540
Website: www.element.com

Analytical Report

(consolidated MDL)

WO#: **18100762**

Date Reported: **10/31/2018**

CLIENT: Approach Environmental, LLC **Collection Date:** 10/18/2018 10:30:00 AM

Project: Approach Environmental - LDNR Residential Water Wells

Lab ID: 18100762-001 **Matrix:** WATER

Client Sample ID 262- Mason Turner

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS IN WATER					**SW8270C**	**E625/SW351**	Analyst: **CRM**
3,3´-Dichlorobenzidine	< 0.0102	0.000486	0.0102		mg/L	1	10/21/2018 2:42:00 PM
3-Nitroaniline	< 0.0204	0.000510	0.0204		mg/L	1	10/21/2018 2:42:00 PM
4-Chloroaniline	< 0.00510	0.000242	0.00510		mg/L	1	10/21/2018 2:42:00 PM
4-Nitroaniline	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
4-Nitrophenol	< 0.0204	0.00510	0.0204		mg/L	1	10/21/2018 2:42:00 PM
Aniline	< 0.00510	0.000500	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Biphenyl	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Bis(2-chloroethyl)ether	< 0.00510	0.0000833	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Bis(2-chloroisopropyl)ether	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Bis(2-ethylhexyl)phthalate	0.00410	0.000308	0.00510	J	mg/L	1	10/21/2018 2:42:00 PM
Butyl benzyl phthalate	< 0.00510	0.000108	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Dibenzofuran	< 0.00510	0.0000816	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Diethyl phthalate	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Dimethyl phthalate	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Di-n-octyl phthalate	< 0.0102	0.000185	0.0102		mg/L	1	10/21/2018 2:42:00 PM
Dinoseb	< 0.00510	0.000306	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Hexachlorobenzene	< 0.00102	0.000510	0.00102		mg/L	1	10/21/2018 2:42:00 PM
Hexachlorobutadiene	< 0.00204	0.00102	0.00204		mg/L	1	10/21/2018 2:42:00 PM
Hexachlorocyclopentadiene	< 0.0102	0.000510	0.0102		mg/L	1	10/21/2018 2:42:00 PM
Hexachloroethane	< 0.00510	0.00204	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Isophorone	< 0.00510	0.000183	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Nitrobenzene	< 0.00102	0.000510	0.00102		mg/L	1	10/21/2018 2:42:00 PM
N-Nitrosodi-n-propylamine	< 0.00510	0.000510	0.00510		mg/L	1	10/21/2018 2:42:00 PM
N-Nitrosodiphenylamine	< 0.00510	0.000146	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Pentachlorophenol	< 0.0102	0.00102	0.0102		mg/L	1	10/21/2018 2:42:00 PM
Phenol	< 0.00510	0.0000532	0.00510		mg/L	1	10/21/2018 2:42:00 PM
Surr: 2,4,6-Tribromophenol	81.7		47.2-144		%Rec	1	10/21/2018 2:42:00 PM
Surr: 2-Fluorobiphenyl	87.3		52.2-116		%Rec	1	10/21/2018 2:42:00 PM
Surr: 2-Fluorophenol	46.2		27.3-80.6		%Rec	1	10/21/2018 2:42:00 PM
Surr: 4-Terphenyl-d14	94.0		48.1-134		%Rec	1	10/21/2018 2:42:00 PM
Surr: Nitrobenzene-d5	89.1		42.5-144		%Rec	1	10/21/2018 2:42:00 PM
Surr: Phenol-d5	31.3		10-67.1		%Rec	1	10/21/2018 2:42:00 PM

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Analytical Report

(consolidated MDL)

WO#: **18100762**

Date Reported: **10/31/2018**

CLIENT: Approach Environmental, LLC **Collection Date:** 10/18/2018 10:30:00 AM

Project: Approach Environmental - LDNR Residential Water Wells

Lab ID: 18100762-001 **Matrix:** WATER

Client Sample ID 262- Mason Turner

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS IN WATER				**SW8260B**			Analyst: **KSK**
1,1,1,2-Tetrachloroethane	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
1,1,1-Trichloroethane	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
1,1,2,2-Tetrachloroethane	< 0.000500	0.000150	0.000500		mg/L	1	10/19/2018 10:55:00 AM
1,1,2-Trichloroethane	< 0.00500	0.000172	0.00500		mg/L	1	10/19/2018 10:55:00 AM
1,1-Dichloroethane	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
1,1-Dichloroethene	< 0.00500	0.000361	0.00500		mg/L	1	10/19/2018 10:55:00 AM
1,2-Dibromo-3-chloropropane	< 0.00500	0.000210	0.00500		mg/L	1	10/19/2018 10:55:00 AM
1,2-Dichlorobenzene	< 0.0200	0.000500	0.0200		mg/L	1	10/19/2018 10:55:00 AM
1,2-Dichloroethane	< 0.00500	0.000500	0.00500		mg/L	1	10/19/2018 10:55:00 AM
1,2-Dichloroethene, Total	< 0.00600	0.000400	0.00600		mg/L	1	10/19/2018 10:55:00 AM
1,2-Dichloropropane	< 0.00500	0.000148	0.00500		mg/L	1	10/19/2018 10:55:00 AM
1,3-Dichlorobenzene	< 0.0100	0.000500	0.0100		mg/L	1	10/19/2018 10:55:00 AM
1,4-Dichlorobenzene	< 0.0200	0.000500	0.0200		mg/L	1	10/19/2018 10:55:00 AM
2-Butanone	< 0.0100	0.000442	0.0100		mg/L	1	10/19/2018 10:55:00 AM
4-Methyl-2-pentanone	< 0.0100	0.000325	0.0100		mg/L	1	10/19/2018 10:55:00 AM
Acetone	< 0.0100	0.00226	0.0100		mg/L	1	10/19/2018 10:55:00 AM
Benzene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Bromodichloromethane	< 0.00500	0.000136	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Bromoform	< 0.00500	0.000500	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Bromomethane	< 0.00500	0.000688	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Carbon disulfide	< 0.0100	0.000133	0.0100		mg/L	1	10/19/2018 10:55:00 AM
Carbon tetrachloride	< 0.00500	0.0000773	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Chlorobenzene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Chlorodibromomethane	< 0.00500	0.000170	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Chloroethane	< 0.0100	0.00155	0.0100		mg/L	1	10/19/2018 10:55:00 AM
Chloroform	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Chloromethane	< 0.00500	0.00200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
cis-1,2-Dichloroethene	< 0.00300	0.000200	0.00300		mg/L	1	10/19/2018 10:55:00 AM
cis-1,3-Dichloropropene	< 0.00200	0.000500	0.00200		mg/L	1	10/19/2018 10:55:00 AM
Ethylbenzene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Isobutyl alcohol	< 0.100	0.00400	0.100		mg/L	1	10/19/2018 10:55:00 AM
Methyl tert-butyl ether	< 0.00500	0.000500	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Methylene chloride	< 0.00500	0.000457	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Styrene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
C	Value is below Minimum Compound Limit.	DF	Dilution Factor
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Element Materials Technology Lafayette
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Website: www.element.com

Analytical Report

(consolidated MDL)

WO#: **18100762**

Date Reported: **10/31/2018**

CLIENT: Approach Environmental, LLC **Collection Date:** 10/18/2018 10:30:00 AM

Project: Approach Environmental - LDNR Residential Water Wells

Lab ID: 18100762-001 **Matrix:** WATER

Client Sample ID 262- Mason Turner

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS IN WATER					**SW8260B**		Analyst: **KSK**
Tetrachloroethene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Toluene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
trans-1,2-Dichloroethene	< 0.00300	0.000204	0.00300		mg/L	1	10/19/2018 10:55:00 AM
trans-1,3-Dichloropropene	< 0.00200	0.000500	0.00200		mg/L	1	10/19/2018 10:55:00 AM
Trichloroethene	< 0.00500	0.000500	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Trichlorofluoromethane	< 0.00500	0.00200	0.00500		mg/L	1	10/19/2018 10:55:00 AM
Vinyl chloride	< 0.00200	0.00200	0.00200		mg/L	1	10/19/2018 10:55:00 AM
Xylenes, Total	< 0.0150	0.00150	0.0150		mg/L	1	10/19/2018 10:55:00 AM
Surr: 4-Bromofluorobenzene	101		65.1-136		%Rec	1	10/19/2018 10:55:00 AM
Surr: Dibromofluoromethane	94.4		40.4-143		%Rec	1	10/19/2018 10:55:00 AM
Surr: Toluene-d8	100		58.2-127		%Rec	1	10/19/2018 10:55:00 AM
TOTAL DISSOLVED SOLIDS					**SM2540C**		Analyst: **GMS**
Total Dissolved Solids (Residue, Filterable)	72.0	11.9	20.0		mg/L	1	10/20/2018 8:03:00 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
C	Value is below Minimum Compound Limit.	DF	Dilution Factor
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

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Analytical Report

(consolidated MDL)

WO#: **18100762**

Date Reported: **10/31/2018**

CLIENT: Approach Environmental, LLC **Collection Date:** 10/18/2018 10:30:00 AM

Project: Approach Environmental - LDNR Residential Water Wells

Lab ID: 18100762-003 **Matrix:** WATER

Client Sample ID Trip Blank

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TPH-GRO IN WATER BY SW8015					**SW8015B**		Analyst: **CRM**
TPH (Gasoline Range)	0.0622	0.0149	0.150	J	mg/L	1	10/19/2018 11:46:00 AM
Surr: alpha, alpha, alpha-Trifluorotoluene	106		70-130		%Rec	1	10/19/2018 11:46:00 AM
VOLATILES BY GC/MS IN WATER					**SW8260B**		Analyst: **KSK**
1,1,1,2-Tetrachloroethane	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
1,1,1-Trichloroethane	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
1,1,2,2-Tetrachloroethane	< 0.000500	0.000150	0.000500		mg/L	1	10/19/2018 11:37:00 AM
1,1,2-Trichloroethane	< 0.00500	0.000172	0.00500		mg/L	1	10/19/2018 11:37:00 AM
1,1-Dichloroethane	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
1,1-Dichloroethene	< 0.00500	0.000361	0.00500		mg/L	1	10/19/2018 11:37:00 AM
1,2-Dibromo-3-chloropropane	< 0.00500	0.000210	0.00500		mg/L	1	10/19/2018 11:37:00 AM
1,2-Dichlorobenzene	< 0.0200	0.000500	0.0200		mg/L	1	10/19/2018 11:37:00 AM
1,2-Dichloroethane	< 0.00500	0.000500	0.00500		mg/L	1	10/19/2018 11:37:00 AM
1,2-Dichloroethene, Total	< 0.00600	0.000400	0.00600		mg/L	1	10/19/2018 11:37:00 AM
1,2-Dichloropropane	< 0.00500	0.000148	0.00500		mg/L	1	10/19/2018 11:37:00 AM
1,3-Dichlorobenzene	< 0.0100	0.000500	0.0100		mg/L	1	10/19/2018 11:37:00 AM
1,4-Dichlorobenzene	< 0.0200	0.000500	0.0200		mg/L	1	10/19/2018 11:37:00 AM
2-Butanone	< 0.0100	0.000442	0.0100		mg/L	1	10/19/2018 11:37:00 AM
4-Methyl-2-pentanone	< 0.0100	0.000325	0.0100		mg/L	1	10/19/2018 11:37:00 AM
Acetone	< 0.0100	0.00226	0.0100		mg/L	1	10/19/2018 11:37:00 AM
Benzene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Bromodichloromethane	< 0.00500	0.000136	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Bromoform	< 0.00500	0.000500	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Bromomethane	< 0.00500	0.000688	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Carbon disulfide	< 0.0100	0.000133	0.0100		mg/L	1	10/19/2018 11:37:00 AM
Carbon tetrachloride	< 0.00500	0.0000773	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Chlorobenzene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Chlorodibromomethane	< 0.00500	0.000170	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Chloroethane	< 0.0100	0.00155	0.0100		mg/L	1	10/19/2018 11:37:00 AM
Chloroform	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Chloromethane	< 0.00500	0.00200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
cis-1,2-Dichloroethene	< 0.00300	0.000200	0.00300		mg/L	1	10/19/2018 11:37:00 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
C	Value is below Minimum Compound Limit.	DF	Dilution Factor
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	M	Matrix Interference
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Analytical Report

(consolidated MDL)

WO#: **18100762**

Date Reported: **10/31/2018**

CLIENT: Approach Environmental, LLC **Collection Date:** 10/18/2018 10:30:00 AM

Project: Approach Environmental - LDNR Residential Water Wells

Lab ID: 18100762-003 **Matrix:** WATER

Client Sample ID Trip Blank

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS IN WATER				**SW8260B**			Analyst: **KSK**
cis-1,3-Dichloropropene	< 0.00200	0.000500	0.00200		mg/L	1	10/19/2018 11:37:00 AM
Ethylbenzene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Isobutyl alcohol	< 0.100	0.00400	0.100		mg/L	1	10/19/2018 11:37:00 AM
Methyl tert-butyl ether	< 0.00500	0.000500	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Methylene chloride	< 0.00500	0.000457	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Styrene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Tetrachloroethene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Toluene	< 0.00500	0.000200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
trans-1,2-Dichloroethene	< 0.00300	0.000204	0.00300		mg/L	1	10/19/2018 11:37:00 AM
trans-1,3-Dichloropropene	< 0.00200	0.000500	0.00200		mg/L	1	10/19/2018 11:37:00 AM
Trichloroethene	< 0.00500	0.000500	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Trichlorofluoromethane	< 0.00500	0.00200	0.00500		mg/L	1	10/19/2018 11:37:00 AM
Vinyl chloride	< 0.00200	0.00200	0.00200		mg/L	1	10/19/2018 11:37:00 AM
Xylenes, Total	< 0.0150	0.00150	0.0150		mg/L	1	10/19/2018 11:37:00 AM
Surr: 4-Bromofluorobenzene	99.2		65.1-136		%Rec	1	10/19/2018 11:37:00 AM
Surr: Dibromofluoromethane	95.1		40.4-143		%Rec	1	10/19/2018 11:37:00 AM
Surr: Toluene-d8	98.6		58.2-127		%Rec	1	10/19/2018 11:37:00 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
C	Value is below Minimum Compound Limit.	DF	Dilution Factor
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28090**

Sample ID **MB-28090**	SampType: **MBLK**	TestCode: **8270_W_LVI_**	Units: **mg/L**	Prep Date: **10/19/2018**	RunNo: **73484**
Client ID: **PBW**	Batch ID: **28090**	TestNo: **SW8270C**	**SW3511**	Analysis Date: **10/20/2018**	SeqNo: **1839003**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	< 0.000519	0.000519									
Acenaphthene	< 0.00104	0.00104									
Acenaphthylene	< 0.00104	0.00104									
Anthracene	< 0.00104	0.00104									
Benzo(a)anthracene	< 0.000519	0.000519									
Benzo(a)pyrene	< 0.000176	0.000176									
Benzo(b)fluoranthene	< 0.000519	0.000519									
Benzo(k)fluoranthene	< 0.000519	0.000519									
Chrysene	< 0.000519	0.000519									
Dibenz(a,h)anthracene	< 0.00104	0.00104									
Fluoranthene	< 0.00104	0.00104									
Fluorene	< 0.000623	0.000623									
Indeno(1,2,3-cd)pyrene	< 0.000519	0.000519									
Naphthalene	< 0.00104	0.00104									
Phenanthrene	< 0.00104	0.00104									
Pyrene	< 0.00104	0.00104									
Surr: 4-Terphenyl-d14	0.00211		0.002377		88.7	49.2	161				

Sample ID **LCSD-28090**	SampType: **LCSD**	TestCode: **8270_W_LVI_**	Units: **mg/L**	Prep Date: **10/19/2018**	RunNo: **73484**
Client ID: **LCSS02**	Batch ID: **28090**	TestNo: **SW8270C**	**SW3511**	Analysis Date: **10/20/2018**	SeqNo: **1839007**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	0.00239	0.000523	0.002390	0	100	60.8	127	0.002298	3.91	40	
Acenaphthene	0.00215	0.00105	0.002395	0	89.7	72.5	121	0.002155	0.333	40	
Acenaphthylene	0.00232	0.00105	0.002395	0	97.0	65.7	128	0.002174	6.64	40	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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Website: www.element.com

QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28090**

Sample ID **LCSD-28090**	SampType: **LCSD**	TestCode: **8270_W_LVI_**	Units: **mg/L**	Prep Date: **10/19/2018**	RunNo: **73484**
Client ID: **LCSS02**	Batch ID: **28090**	TestNo: **SW8270C**	**SW3511**	Analysis Date: **10/20/2018**	SeqNo: **1839007**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	0.00192	0.00105	0.002395	0	80.1	73.4	120	0.001867	2.71	40	
Benzo(a)anthracene	0.00237	0.000523	0.002395	0	98.9	69	121	0.002178	8.36	40	
Benzo(a)pyrene	0.00211	0.000178	0.002395	0	88.1	70.6	120	0.001978	6.49	40	
Benzo(b)fluoranthene	0.00244	0.000523	0.002395	0	102	65.3	127	0.002315	5.38	40	
Benzo(k)fluoranthene	0.00244	0.000523	0.002395	0	102	68.6	125	0.002315	5.45	40	
Chrysene	0.00237	0.000523	0.002395	0	99.0	74.4	120	0.002267	4.50	40	
Dibenz(a,h)anthracene	0.00232	0.00105	0.002395	0	96.9	66.4	126	0.002351	1.36	40	
Fluoranthene	0.00263	0.00105	0.002395	0	110	70.7	121	0.002739	4.21	40	
Fluorene	0.00199	0.000627	0.002395	0	83.3	62.5	134	0.002063	3.39	40	
Indeno(1,2,3-cd)pyrene	0.00242	0.000523	0.002395	0	101	66.9	120	0.002368	2.09	40	
Naphthalene	0.00225	0.00105	0.002395	0	93.8	63.5	137	0.002169	3.49	40	
Phenanthrene	0.00233	0.00105	0.002395	0	97.3	74.1	118	0.002236	4.07	40	
Pyrene	0.00236	0.00105	0.002395	0	98.5	73.2	120	0.002193	7.32	40	
Surr: 4-Terphenyl-d14	0.00227		0.002395		94.9	49.2	161		0	40	

Sample ID **LCS-28090**	SampType: **LCS**	TestCode: **8270_W_LVI_**	Units: **mg/L**	Prep Date: **10/19/2018**	RunNo: **73484**
Client ID: **LCSW**	Batch ID: **28090**	TestNo: **SW8270C**	**SW3511**	Analysis Date: **10/20/2018**	SeqNo: **1839008**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	0.00230	0.000519	0.002371	0	97.0	60.8	127				
Acenaphthene	0.00216	0.00104	0.002375	0	90.8	72.5	121				
Acenaphthylene	0.00217	0.00104	0.002375	0	91.5	65.7	128				
Anthracene	0.00187	0.00104	0.002375	0	78.6	73.4	120				
Benzo(a)anthracene	0.00218	0.000519	0.002375	0	91.7	69	121				
Benzo(a)pyrene	0.00198	0.000176	0.002375	0	83.3	70.6	120				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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Website: www.element.com

QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28090**

Sample ID **LCS-28090**	SampType: **LCS**	TestCode: **8270_W_LVI_**	Units: **mg/L**	Prep Date: **10/19/2018**	RunNo: **73484**
Client ID: **LCSW**	Batch ID: **28090**	TestNo: **SW8270C**	**SW3511**	Analysis Date: **10/20/2018**	SeqNo: **1839008**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(b)fluoranthene	0.00232	0.000519	0.002375	0	97.5	65.3	127				
Benzo(k)fluoranthene	0.00231	0.000519	0.002375	0	97.5	68.6	125				
Chrysene	0.00227	0.000519	0.002375	0	95.5	74.4	120				
Dibenz(a,h)anthracene	0.00235	0.00104	0.002375	0	99.0	66.4	126				
Fluoranthene	0.00274	0.00104	0.002375	0	115	70.7	121				
Fluorene	0.00206	0.000622	0.002375	0	86.9	62.5	134				
Indeno(1,2,3-cd)pyrene	0.00237	0.000519	0.002375	0	99.7	66.9	120				
Naphthalene	0.00217	0.00104	0.002375	0	91.3	63.5	137				
Phenanthrene	0.00224	0.00104	0.002375	0	94.2	74.1	118				
Pyrene	0.00219	0.00104	0.002375	0	92.3	73.2	120				
Surr: 4-Terphenyl-d14	0.00231		0.002375		97.3	49.2	161				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28091**

Sample ID **LCS-D-28091**	SampType: **LCS**	TestCode: **8015_DO_W_**	Units: **mg/L**	Prep Date: **10/19/2018**	RunNo: **73483**
Client ID: **LCSW**	Batch ID: **28091**	TestNo: **SW8015B**	**SW3511**	Analysis Date: **10/19/2018**	SeqNo: **1838997**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel Range)	1.82	0.135	1.786	0	102	70	130				
Surr: 4-Terphenyl-d14	0.0652		0.05952		110	51.4	146				

Sample ID **LCSD-D-28091**	SampType: **LCSD**	TestCode: **8015_DO_W_**	Units: **mg/L**	Prep Date: **10/19/2018**	RunNo: **73483**
Client ID: **LCSS02**	Batch ID: **28091**	TestNo: **SW8015B**	**SW3511**	Analysis Date: **10/19/2018**	SeqNo: **1838998**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel Range)	1.85	0.136	1.789	0	104	70	130	1.820	1.87	14.1	
Surr: 4-Terphenyl-d14	0.0660		0.05965		111	51.4	146		0	40	

Sample ID **LCSD-M-28091**	SampType: **LCSD**	TestCode: **8015_DO_W_**	Units: **mg/L**	Prep Date: **10/19/2018**	RunNo: **73483**
Client ID: **LCSS02**	Batch ID: **28091**	TestNo: **SW8015B**	**SW3511**	Analysis Date: **10/19/2018**	SeqNo: **1838999**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Oil Range)	1.50	0.124	1.774	0	84.5	70	130	1.584	5.44	23.2	
Surr: 4-Terphenyl-d14	0.0568		0.05913		96.1	51.4	146		0	40	

Sample ID **LCS-M-28091**	SampType: **LCS**	TestCode: **8015_DO_W_**	Units: **mg/L**	Prep Date: **10/19/2018**	RunNo: **73483**
Client ID: **LCSW**	Batch ID: **28091**	TestNo: **SW8015B**	**SW3511**	Analysis Date: **10/19/2018**	SeqNo: **1839000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Oil Range)	1.58	0.125	1.780	0	88.9	70	130				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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TEL: (337) 235-0483 FAX: (337) 233-6540
Website: www.element.com

QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28091**

Sample ID	**LCS-M-28091**	SampType:	**LCS**	TestCode:	**8015_DO_W_**	Units:	**mg/L**	Prep Date:	**10/19/2018**	RunNo:	**73483**
Client ID:	**LCSW**	Batch ID:	**28091**	TestNo:	**SW8015B**	**SW3511**		Analysis Date:	**10/19/2018**	SeqNo:	**1839000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	0.0662		0.05934		111	51.4	146				

Sample ID	**MB-28091**	SampType:	**MBLK**	TestCode:	**8015_DO_W_**	Units:	**mg/L**	Prep Date:	**10/19/2018**	RunNo:	**73483**
Client ID:	**PBW**	Batch ID:	**28091**	TestNo:	**SW8015B**	**SW3511**		Analysis Date:	**10/19/2018**	SeqNo:	**1839001**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel Range)	< 0.135	0.135									
TPH (Oil Range)	< 0.125	0.125									
Surr: 4-Terphenyl-d14	0.0622		0.05933		105	51.4	146				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID **MB-28100** SampType: **MBLK** TestCode: **8270_W_REC** Units: **mg/L** Prep Date: **10/19/2018** RunNo: **73486**

Client ID: **PBW** Batch ID: **28100** TestNo: **SW8270C** **E625/SW351** Analysis Date: **10/21/2018** SeqNo: **1839012**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4,5-Tetrachlorobenzene	< 0.00100	0.00100									
1,2,4-Trichlorobenzene	< 0.00500	0.00500									
1,2-Dichlorobenzene	< 0.00500	0.00500									
1,3-Dichlorobenzene	< 0.00500	0.00500									
1,3-Dinitrobenzene	< 0.00500	0.00500									
1,4-Dichlorobenzene	< 0.00500	0.00500									
2,3,4,6-Tetrachlorophenol	< 0.00500	0.00500									
2,4,5-Trichlorophenol	< 0.0100	0.0100									
2,4,6-Trichlorophenol	< 0.00500	0.00500									
2,4-Dichlorophenol	< 0.00500	0.00500									
2,4-Dimethylphenol	< 0.00500	0.00500									
2,4-Dinitrophenol	< 0.0200	0.0200									
2,4-Dinitrotoluene	< 0.00500	0.00500									
2,6-Dinitrotoluene	< 0.00500	0.00500									
2-Chloronaphthalene	< 0.00500	0.00500									
2-Chlorophenol	< 0.00500	0.00500									
2-Nitroaniline	< 0.00500	0.00500									
3,3´-Dichlorobenzidine	< 0.0100	0.0100									
3-Nitroaniline	< 0.0200	0.0200									
4-Chloroaniline	< 0.00500	0.00500									
4-Nitroaniline	< 0.00500	0.00500									
4-Nitrophenol	< 0.0200	0.0200									
Aniline	< 0.00500	0.00500									
Biphenyl	< 0.00500	0.00500									
Bis(2-chloroethyl)ether	< 0.00500	0.00500									
Bis(2-chloroisopropyl)ether	< 0.00500	0.00500									

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID **MB-28100** SampType: **MBLK** TestCode: **8270_W_REC** Units: **mg/L** Prep Date: **10/19/2018** RunNo: **73486**

Client ID: **PBW** Batch ID: **28100** TestNo: **SW8270C** **E625/SW351** Analysis Date: **10/21/2018** SeqNo: **1839012**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bis(2-ethylhexyl)phthalate	0.00328	0.00500									J
Butyl benzyl phthalate	< 0.00500	0.00500									
Dibenzofuran	< 0.00500	0.00500									
Diethyl phthalate	< 0.00500	0.00500									
Dimethyl phthalate	< 0.00500	0.00500									
Di-n-octyl phthalate	< 0.0100	0.0100									
Dinoseb	< 0.00500	0.00500									
Hexachlorobenzene	< 0.00100	0.00100									
Hexachlorobutadiene	< 0.00200	0.00200									
Hexachlorocyclopentadiene	< 0.0100	0.0100									
Hexachloroethane	< 0.00500	0.00500									
Isophorone	< 0.00500	0.00500									
Nitrobenzene	< 0.00100	0.00100									
N-Nitrosodi-n-propylamine	< 0.00500	0.00500									
N-Nitrosodiphenylamine	< 0.00500	0.00500									
Pentachlorophenol	< 0.0100	0.0100									
Phenol	< 0.00500	0.00500									
Surr: 2,4,6-Tribromophenol	0.0290		0.03000		96.7	47.2	144				
Surr: 2-Fluorobiphenyl	0.0210		0.02000		105	52.2	116				
Surr: 2-Fluorophenol	0.0207		0.03000		68.9	27.3	80.6				
Surr: 4-Terphenyl-d14	0.0226		0.02000		113	48.1	134				
Surr: Nitrobenzene-d5	0.0197		0.02000		98.5	42.5	144				
Surr: Phenol-d5	0.0146		0.03000		48.6	10	67.1				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID **LCSD-28100** SampType: **LCSD** TestCode: **8270_W_REC** Units: **mg/L** Prep Date: **10/19/2018** RunNo: **73486**

Client ID: **LCSS02** Batch ID: **28100** TestNo: **SW8270C** **E625/SW351** Analysis Date: **10/21/2018** SeqNo: **1839013**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4,5-Tetrachlorobenzene	0.0420	0.00100	0.05000	0	84.1	51.3	119	0.04018	4.52	40	
1,2,4-Trichlorobenzene	0.0389	0.00500	0.05000	0	77.9	47.4	103	0.03703	5.03	40	
1,2-Dichlorobenzene	0.0387	0.00500	0.05000	0	77.3	32	119	0.03686	4.79	40	
1,3-Dichlorobenzene	0.0367	0.00500	0.05000	0	73.5	33.9	108	0.03498	4.87	40	
1,3-Dinitrobenzene	0.0465	0.00500	0.05000	0	93.0	56.5	132	0.04251	8.92	40	
1,4-Dichlorobenzene	0.0367	0.00500	0.05000	0	73.4	31.8	107	0.03477	5.35	40	
2,3,4,6-Tetrachlorophenol	0.0518	0.00500	0.05000	0	104	71.4	118	0.04833	6.88	40	
2,4,5-Trichlorophenol	0.0497	0.0100	0.05000	0	99.5	63.4	113	0.04660	6.50	40	
2,4,6-Trichlorophenol	0.0484	0.00500	0.05000	0	96.8	62.5	109	0.04509	7.05	40	
2,4-Dichlorophenol	0.0476	0.00500	0.05000	0	95.3	65.8	105	0.04494	5.83	40	
2,4-Dimethylphenol	0.0472	0.00500	0.05000	0	94.3	56.4	106	0.04454	5.74	40	
2,4-Dinitrophenol	0.0492	0.0200	0.05000	0	98.4	10	171	0.04628	6.13	40	
2,4-Dinitrotoluene	0.0461	0.00500	0.05000	0	92.1	72.6	107	0.04306	6.76	40	
2,6-Dinitrotoluene	0.0492	0.00500	0.05000	0	98.4	62.5	112	0.04595	6.86	40	
2-Chloronaphthalene	0.0430	0.00500	0.05000	0	85.9	43.2	121	0.04050	5.93	40	
2-Chlorophenol	0.0446	0.00500	0.05000	0	89.2	57.4	104	0.04125	7.76	40	
2-Nitroaniline	0.0504	0.00500	0.05000	0	101	71.4	120	0.04647	8.09	40	
3,3´-Dichlorobenzidine	0.104	0.0100	0.1000	0	104	49.2	113	0.09971	3.77	40	
3-Nitroaniline	0.0417	0.0200	0.05000	0	83.4	37.7	116	0.03883	7.18	40	
4-Chloroaniline	0.0436	0.00500	0.05000	0	87.1	56.4	98.6	0.04073	6.75	40	
4-Nitroaniline	0.0496	0.00500	0.05000	0	99.3	64	113	0.04623	7.09	40	
4-Nitrophenol	0.0237	0.0200	0.05000	0	47.4	22.5	63.1	0.02171	8.81	40	
Aniline	0.0392	0.00500	0.05000	0	78.5	48.9	102	0.03578	9.24	40	
Biphenyl	0.0455	0.00500	0.05000	0	91.0	41.7	130	0.04290	5.86	40	
Bis(2-chloroethyl)ether	0.0438	0.00500	0.05000	0	87.6	51.9	112	0.04062	7.52	40	
Bis(2-chloroisopropyl)ether	0.0471	0.00500	0.05000	0	94.2	50.1	125	0.04282	9.51	40	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID **LCSD-28100** SampType: **LCSD** TestCode: **8270_W_REC** Units: **mg/L** Prep Date: **10/19/2018** RunNo: **73486**

Client ID: **LCSS02** Batch ID: **28100** TestNo: **SW8270C** **E625/SW351** Analysis Date: **10/21/2018** SeqNo: **1839013**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bis(2-ethylhexyl)phthalate	0.0524	0.00500	0.05000	0	105	46.9	137	0.04966	5.36	40	
Butyl benzyl phthalate	0.0527	0.00500	0.05000	0	105	47.6	134	0.04916	6.92	40	
Dibenzofuran	0.0479	0.00500	0.05000	0	95.7	59.5	126	0.04502	6.14	40	
Diethyl phthalate	0.0492	0.00500	0.05000	0	98.4	55.4	121	0.04580	7.15	40	
Dimethyl phthalate	0.0499	0.00500	0.05000	0	99.8	66	109	0.04651	6.98	40	
Di-n-octyl phthalate	0.0552	0.0100	0.05000	0	110	36.9	145	0.05113	7.60	40	
Dinoseb	0.0431	0.00500	0.05000	0	86.2	10	180	0.03984	7.82	40	
Hexachlorobenzene	0.0453	0.00100	0.05000	0	90.5	59.5	100	0.04164	8.32	40	
Hexachlorobutadiene	0.0354	0.00200	0.05000	0	70.9	43.1	101	0.03472	2.05	40	
Hexachlorocyclopentadiene	0.0446	0.0100	0.05000	0	89.3	10	151	0.04244	5.07	40	
Hexachloroethane	0.0342	0.00500	0.05000	0	68.3	22.2	110	0.03285	3.91	40	
Isophorone	0.0525	0.00500	0.05000	0	105	63.1	110	0.04852	7.94	40	
Nitrobenzene	0.0460	0.00100	0.05000	0	91.9	67	108	0.04242	8.04	40	
N-Nitrosodi-n-propylamine	0.0464	0.00500	0.05000	0	92.8	49.4	130	0.04263	8.47	40	
N-Nitrosodiphenylamine	0.0460	0.00500	0.05000	0	92.0	67.1	105	0.04318	6.34	40	
Pentachlorophenol	0.0361	0.0100	0.05000	0	72.3	47.1	104	0.03364	7.18	40	
Phenol	0.0209	0.00500	0.05000	0	41.7	25.2	50.1	0.01920	8.26	40	
Surr: 2,4,6-Tribromophenol	0.0260		0.03000		86.7	47.2	144		0	40	
Surr: 2-Fluorobiphenyl	0.0195		0.02000		97.3	52.2	116		0	40	
Surr: 2-Fluorophenol	0.0183		0.03000		61.1	27.3	80.6		0	40	
Surr: 4-Terphenyl-d14	0.0214		0.02000		107	48.1	134		0	40	
Surr: Nitrobenzene-d5	0.0187		0.02000		93.5	42.5	144		0	40	
Surr: Phenol-d5	0.0121		0.03000		40.5	10	67.1		0	40	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID **LCS-28100** SampType: **LCS** TestCode: **8270_W_REC** Units: **mg/L** Prep Date: **10/19/2018** RunNo: **73486**

Client ID: **LCSW** Batch ID: **28100** TestNo: **SW8270C** **E625/SW351** Analysis Date: **10/21/2018** SeqNo: **1839014**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4,5-Tetrachlorobenzene	0.0402	0.00100	0.05000	0	80.4	51.3	119				
1,2,4-Trichlorobenzene	0.0370	0.00500	0.05000	0	74.1	47.4	103				
1,2-Dichlorobenzene	0.0369	0.00500	0.05000	0	73.7	32	119				
1,3-Dichlorobenzene	0.0350	0.00500	0.05000	0	70.0	33.9	108				
1,3-Dinitrobenzene	0.0425	0.00500	0.05000	0	85.0	56.5	132				
1,4-Dichlorobenzene	0.0348	0.00500	0.05000	0	69.5	31.8	107				
2,3,4,6-Tetrachlorophenol	0.0483	0.00500	0.05000	0	96.7	71.4	118				
2,4,5-Trichlorophenol	0.0466	0.0100	0.05000	0	93.2	63.4	113				
2,4,6-Trichlorophenol	0.0451	0.00500	0.05000	0	90.2	62.5	109				
2,4-Dichlorophenol	0.0449	0.00500	0.05000	0	89.9	65.8	105				
2,4-Dimethylphenol	0.0445	0.00500	0.05000	0	89.1	56.4	106				
2,4-Dinitrophenol	0.0463	0.0200	0.05000	0	92.6	10	171				
2,4-Dinitrotoluene	0.0431	0.00500	0.05000	0	86.1	72.6	107				
2,6-Dinitrotoluene	0.0460	0.00500	0.05000	0	91.9	62.5	112				
2-Chloronaphthalene	0.0405	0.00500	0.05000	0	81.0	43.2	121				
2-Chlorophenol	0.0412	0.00500	0.05000	0	82.5	57.4	104				
2-Nitroaniline	0.0465	0.00500	0.05000	0	92.9	71.4	120				
3,3´-Dichlorobenzidine	0.0997	0.0100	0.1000	0	99.7	49.2	113				
3-Nitroaniline	0.0388	0.0200	0.05000	0	77.7	37.7	116				
4-Chloroaniline	0.0407	0.00500	0.05000	0	81.5	56.4	98.6				
4-Nitroaniline	0.0462	0.00500	0.05000	0	92.5	64	113				
4-Nitrophenol	0.0217	0.0200	0.05000	0	43.4	22.5	63.1				
Aniline	0.0358	0.00500	0.05000	0	71.6	48.9	102				
Biphenyl	0.0429	0.00500	0.05000	0	85.8	41.7	130				
Bis(2-chloroethyl)ether	0.0406	0.00500	0.05000	0	81.2	51.9	112				
Bis(2-chloroisopropyl)ether	0.0428	0.00500	0.05000	0	85.6	50.1	125				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	RL	Reporting Limit	S	Spike Recovery outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID **LCS-28100** SampType: **LCS** TestCode: **8270_W_REC** Units: **mg/L** Prep Date: **10/19/2018** RunNo: **73486**

Client ID: **LCSW** Batch ID: **28100** TestNo: **SW8270C** **E625/SW351** Analysis Date: **10/21/2018** SeqNo: **1839014**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bis(2-ethylhexyl)phthalate	0.0497	0.00500	0.05000	0	99.3	46.9	137				
Butyl benzyl phthalate	0.0492	0.00500	0.05000	0	98.3	47.6	134				
Dibenzofuran	0.0450	0.00500	0.05000	0	90.0	59.5	126				
Diethyl phthalate	0.0458	0.00500	0.05000	0	91.6	55.4	121				
Dimethyl phthalate	0.0465	0.00500	0.05000	0	93.0	66	109				
Di-n-octyl phthalate	0.0511	0.0100	0.05000	0	102	36.9	145				
Dinoseb	0.0398	0.00500	0.05000	0	79.7	10	180				
Hexachlorobenzene	0.0416	0.00100	0.05000	0	83.3	59.5	100				
Hexachlorobutadiene	0.0347	0.00200	0.05000	0	69.4	43.1	101				
Hexachlorocyclopentadiene	0.0424	0.0100	0.05000	0	84.9	10	151				
Hexachloroethane	0.0329	0.00500	0.05000	0	65.7	22.2	110				
Isophorone	0.0485	0.00500	0.05000	0	97.0	63.1	110				
Nitrobenzene	0.0424	0.00100	0.05000	0	84.8	67	108				
N-Nitrosodi-n-propylamine	0.0426	0.00500	0.05000	0	85.3	49.4	130				
N-Nitrosodiphenylamine	0.0432	0.00500	0.05000	0	86.4	67.1	105				
Pentachlorophenol	0.0336	0.0100	0.05000	0	67.3	47.1	104				
Phenol	0.0192	0.00500	0.05000	0	38.4	25.2	50.1				
Surr: 2,4,6-Tribromophenol	0.0228		0.03000		75.9	47.2	144				
Surr: 2-Fluorobiphenyl	0.0170		0.02000		85.0	52.2	116				
Surr: 2-Fluorophenol	0.0157		0.03000		52.3	27.3	80.6				
Surr: 4-Terphenyl-d14	0.0209		0.02000		105	48.1	134				
Surr: Nitrobenzene-d5	0.0164		0.02000		81.8	42.5	144				
Surr: Phenol-d5	0.0105		0.03000		35.0	10	67.1				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID	**MB-28100**	SampType:	**MBLK**	TestCode:	**625_ALL**	Units:	**mg/L**	Prep Date:	**10/19/2018**	RunNo:	**73503**
Client ID:	**PBW**	Batch ID:	**28100**	TestNo:	**SW8270C**	**E625/SW351**		Analysis Date:	**10/21/2018**	SeqNo:	**1839157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	< 0.00400	0.00400									
1,3-Dinitrobenzene	< 0.00400	0.00400									
2,4,5-Trichlorophenol	< 0.00800	0.00800									
2,4,6-Trichlorophenol	< 0.00800	0.00800									
2,4-Dichlorophenol	< 0.00800	0.00800									
2,4-Dimethylphenol	< 0.00800	0.00800									
2,4-Dinitrophenol	< 0.0200	0.0200									
2,4-Dinitrotoluene	< 0.00400	0.00400									
2,6-Dinitrotoluene	< 0.00400	0.00400									
2-Chloronaphthalene	< 0.00400	0.00400									
2-Chlorophenol	< 0.00800	0.00800									
2-Nitroaniline	< 0.00400	0.00400									
3,3´-Dichlorobenzidine	< 0.00400	0.00400									
3-Nitroaniline	< 0.00400	0.00400									
4-Chloroaniline	< 0.00400	0.00400									
4-Nitroaniline	< 0.00400	0.00400									
4-Nitrophenol	< 0.0200	0.0200									
Aniline	< 0.00400	0.00400									
Bis(2-chloroethyl)ether	< 0.00400	0.00400									
Bis(2-chloroisopropyl)ether	< 0.00400	0.00400									
Bis(2-ethylhexyl)phthalate	0.00322	0.00400									J
Butyl benzyl phthalate	< 0.00400	0.00400									
Dibenzofuran	< 0.00400	0.00400									
Diethyl phthalate	< 0.00400	0.00400									
Dimethyl phthalate	< 0.00400	0.00400									
Di-n-octyl phthalate	< 0.00400	0.00400									

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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Website: www.element.com

QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC
Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID **MB-28100** SampType: **MBLK** TestCode: **625_ALL** Units: **mg/L** Prep Date: **10/19/2018** RunNo: **73503**
Client ID: **PBW** Batch ID: **28100** TestNo: **SW8270C** **E625/SW351** Analysis Date: **10/21/2018** SeqNo: **1839157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobenzene	< 0.00400	0.00400									
Hexachlorobutadiene	< 0.00400	0.00400									
Hexachlorocyclopentadiene	< 0.00400	0.00400									
Hexachloroethane	< 0.00400	0.00400									
Isophorone	< 0.00400	0.00400									
Nitrobenzene	< 0.00400	0.00400									
N-Nitrosodi-n-propylamine	< 0.00400	0.00400									
N-Nitrosodiphenylamine	< 0.00400	0.00400									
Pentachlorophenol	< 0.00400	0.00400									
Phenol	< 0.00800	0.00800									
Surr: 2,4,6-Tribromophenol	0.0290		0.03000		96.7	74	120				
Surr: 2-Fluorobiphenyl	0.0210		0.02000		105	63	111				
Surr: 2-Fluorophenol	0.0207		0.03000		68.9	40	71				
Surr: Nitrobenzene-d5	0.0197		0.02000		98.5	67	104				
Surr: Phenol-d5	0.0146		0.03000		48.6	27	58				
Surr: Terphenyl-d14	0.0226		0.02000		113	55	123				

Sample ID **LCSD-28100** SampType: **LCSD** TestCode: **625_ALL** Units: **mg/L** Prep Date: **10/19/2018** RunNo: **73503**
Client ID: **LCSS02** Batch ID: **28100** TestNo: **SW8270C** **E625/SW351** Analysis Date: **10/21/2018** SeqNo: **1839159**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	0.0389	0.00400	0.05000	0	77.9	57	130	0.03703	5.03	30	
1,3-Dinitrobenzene	0.0465	0.00400	0.05000	0	93.0	79	120	0.04251	8.92	40	
2,4,5-Trichlorophenol	0.0497	0.00800	0.05000	0	99.5	65	120	0.04660	6.50	40	
2,4,6-Trichlorophenol	0.0484	0.00800	0.05000	0	96.8	52	129	0.04509	7.05	35	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID **LCSD-28100** SampType: **LCSD** TestCode: **625_ALL** Units: **mg/L** Prep Date: **10/19/2018** RunNo: **73503**

Client ID: **LCSS02** Batch ID: **28100** TestNo: **SW8270C** **E625/SW351** Analysis Date: **10/21/2018** SeqNo: **1839159**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dichlorophenol	0.0476	0.00800	0.05000	0	95.3	53	122	0.04494	5.83	30	
2,4-Dimethylphenol	0.0472	0.00800	0.05000	0	94.3	42	120	0.04454	5.74	35	
2,4-Dinitrophenol	0.0492	0.0200	0.05000	0	98.4	5	173	0.04628	6.13	79	
2,4-Dinitrotoluene	0.0495	0.00400	0.05000	0	99.0	48	127	0.04623	6.81	25	
2,6-Dinitrotoluene	0.0492	0.00400	0.05000	0	98.4	68	137	0.04595	6.86	29	
2-Chloronaphthalene	0.0430	0.00400	0.05000	0	85.9	65	120	0.04050	5.93	15	
2-Chlorophenol	0.0446	0.00800	0.05000	0	89.2	36	120	0.04125	7.76	37	
2-Nitroaniline	0.0504	0.00400	0.05000	0	101	80	120	0.04647	8.09	40	
3,3´-Dichlorobenzidine	0.101	0.00400	0.1000	0	101	8	213	0.09699	3.78	65	
3-Nitroaniline	0.0417	0.00400	0.05000	0	83.4	68	101	0.03883	7.18	40	
4-Chloroaniline	0.0436	0.00400	0.05000	0	87.1	65	107	0.04073	6.75	40	
4-Nitroaniline	0.0480	0.00400	0.05000	0	96.0	78	120	0.04470	7.10	40	
4-Nitrophenol	0.0237	0.0200	0.05000	0	47.4	13	129	0.02171	8.81	79	
Aniline	0.0392	0.00400	0.05000	0	78.5	39	101	0.03578	9.24	40	
Bis(2-chloroethyl)ether	0.0438	0.00400	0.05000	0	87.6	43	126	0.04062	7.52	65	
Bis(2-chloroisopropyl)ether	0.0461	0.00400	0.05000	0	92.1	63	139	0.04188	9.52	46	
Bis(2-ethylhexyl)phthalate	0.0514	0.00400	0.05000	0	103	29	137	0.04874	5.36	50	
Butyl benzyl phthalate	0.0527	0.00400	0.05000	0	105	5	140	0.04916	6.92	36	
Dibenzofuran	0.0469	0.00400	0.05000	0	93.8	81	120	0.04409	6.14	40	
Diethyl phthalate	0.0485	0.00400	0.05000	0	97.0	5	120	0.04514	7.14	60	
Dimethyl phthalate	0.0500	0.00400	0.05000	0	99.9	5	120	0.04659	6.98	110	
Di-n-octyl phthalate	0.0552	0.00400	0.05000	0	110	19	132	0.05113	7.60	42	
Hexachlorobenzene	0.0453	0.00400	0.05000	0	90.5	8	142	0.04164	8.32	33	
Hexachlorobutadiene	0.0354	0.00400	0.05000	0	70.9	38	120	0.03472	2.05	38	
Hexachlorocyclopentadiene	0.0504	0.00400	0.05000	0	101	10	116	0.04790	5.18	40	
Hexachloroethane	0.0342	0.00400	0.05000	0	68.3	55	120	0.03285	3.91	32	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
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SDL	Sample detection limit	U	Analyte not detected	W	Sample container temperature is out of limit as sp

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Website: www.element.com

QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID	**LCSD-28100**	SampType:	**LCSD**	TestCode:	**625_ALL**	Units:	**mg/L**	Prep Date:	**10/19/2018**	RunNo:	**73503**
Client ID:	**LCSS02**	Batch ID:	**28100**	TestNo:	**SW8270C**	**E625/SW351**		Analysis Date:	**10/21/2018**	SeqNo:	**1839159**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isophorone	0.0525	0.00400	0.05000	0	105	47	180	0.04852	7.94	56	
Nitrobenzene	0.0460	0.00400	0.05000	0	91.9	54	158	0.04242	8.04	37	
N-Nitrosodi-n-propylamine	0.0464	0.00400	0.05000	0	92.8	14	198	0.04263	8.47	52	
N-Nitrosodiphenylamine	0.0464	0.00400	0.05000	0	92.7	71	120	0.04352	6.34	40	
Pentachlorophenol	0.0349	0.00400	0.05000	0	69.7	38	152	0.03225	7.77	52	
Phenol	0.0209	0.00800	0.05000	0	41.7	17	120	0.01920	8.26	39	
Surr: 2,4,6-Tribromophenol	0.0260		0.03000		86.7	74	120		0	40	
Surr: 2-Fluorobiphenyl	0.0195		0.02000		97.3	63	111		0	40	
Surr: 2-Fluorophenol	0.0183		0.03000		61.1	40	71		0	40	
Surr: Nitrobenzene-d5	0.0187		0.02000		93.5	67	104		0	40	
Surr: Phenol-d5	0.0121		0.03000		40.5	27	58		0	40	
Surr: Terphenyl-d14	0.0213		0.02000		107	55	123		0	40	

Sample ID	**LCS-28100**	SampType:	**LCS**	TestCode:	**625_ALL**	Units:	**mg/L**	Prep Date:	**10/19/2018**	RunNo:	**73503**
Client ID:	**LCSW**	Batch ID:	**28100**	TestNo:	**SW8270C**	**E625/SW351**		Analysis Date:	**10/21/2018**	SeqNo:	**1839160**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	0.0370	0.00400	0.05000	0	74.1	57	130				
1,3-Dinitrobenzene	0.0425	0.00400	0.05000	0	85.0	79	120				
2,4,5-Trichlorophenol	0.0466	0.00800	0.05000	0	93.2	65	120				
2,4,6-Trichlorophenol	0.0451	0.00800	0.05000	0	90.2	52	129				
2,4-Dichlorophenol	0.0449	0.00800	0.05000	0	89.9	53	122				
2,4-Dimethylphenol	0.0445	0.00800	0.05000	0	89.1	42	120				
2,4-Dinitrophenol	0.0463	0.0200	0.05000	0	92.6	5	173				
2,4-Dinitrotoluene	0.0462	0.00400	0.05000	0	92.5	48	127				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	RL	Reporting Limit	S	Spike Recovery outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID	**LCS-28100**	SampType:	**LCS**	TestCode:	**625_ALL**	Units:	**mg/L**	Prep Date:	**10/19/2018**	RunNo:	**73503**
Client ID:	**LCSW**	Batch ID:	**28100**	TestNo:	**SW8270C**	**E625/SW351**		Analysis Date:	**10/21/2018**	SeqNo:	**1839160**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	0.0460	0.00400	0.05000	0	91.9	68	137				
2-Chloronaphthalene	0.0405	0.00400	0.05000	0	81.0	65	120				
2-Chlorophenol	0.0412	0.00800	0.05000	0	82.5	36	120				
2-Nitroaniline	0.0465	0.00400	0.05000	0	92.9	80	120				
3,3´-Dichlorobenzidine	0.0970	0.00400	0.1000	0	97.0	8	213				
3-Nitroaniline	0.0388	0.00400	0.05000	0	77.7	68	101				
4-Chloroaniline	0.0407	0.00400	0.05000	0	81.5	65	107				
4-Nitroaniline	0.0447	0.00400	0.05000	0	89.4	78	120				
4-Nitrophenol	0.0217	0.0200	0.05000	0	43.4	13	129				
Aniline	0.0358	0.00400	0.05000	0	71.6	39	101				
Bis(2-chloroethyl)ether	0.0406	0.00400	0.05000	0	81.2	43	126				
Bis(2-chloroisopropyl)ether	0.0419	0.00400	0.05000	0	83.8	63	139				
Bis(2-ethylhexyl)phthalate	0.0487	0.00400	0.05000	0	97.5	29	137				
Butyl benzyl phthalate	0.0492	0.00400	0.05000	0	98.3	5	140				
Dibenzofuran	0.0441	0.00400	0.05000	0	88.2	81	120				
Diethyl phthalate	0.0451	0.00400	0.05000	0	90.3	5	120				
Dimethyl phthalate	0.0466	0.00400	0.05000	0	93.2	5	120				
Di-n-octyl phthalate	0.0511	0.00400	0.05000	0	102	19	132				
Hexachlorobenzene	0.0416	0.00400	0.05000	0	83.3	8	142				
Hexachlorobutadiene	0.0347	0.00400	0.05000	0	69.4	38	120				
Hexachlorocyclopentadiene	0.0479	0.00400	0.05000	0	95.8	10	116				
Hexachloroethane	0.0329	0.00400	0.05000	0	65.7	55	120				
Isophorone	0.0485	0.00400	0.05000	0	97.0	47	180				
Nitrobenzene	0.0424	0.00400	0.05000	0	84.8	54	158				
N-Nitrosodi-n-propylamine	0.0426	0.00400	0.05000	0	85.3	14	198				
N-Nitrosodiphenylamine	0.0435	0.00400	0.05000	0	87.0	71	120				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28100**

Sample ID	**LCS-28100**	SampType:	**LCS**	TestCode:	**625_ALL**	Units:	**mg/L**	Prep Date:	**10/19/2018**	RunNo:	**73503**
Client ID:	**LCSW**	Batch ID:	**28100**	TestNo:	**SW8270C**	**E625/SW351**		Analysis Date:	**10/21/2018**	SeqNo:	**1839160**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	0.0322	0.00400	0.05000	0	64.5	38	152				
Phenol	0.0192	0.00800	0.05000	0	38.4	17	120				
Surr: 2,4,6-Tribromophenol	0.0228		0.03000		75.9	74	120				
Surr: 2-Fluorobiphenyl	0.0170		0.02000		85.0	63	111				
Surr: 2-Fluorophenol	0.0157		0.03000		52.3	40	71				
Surr: Nitrobenzene-d5	0.0164		0.02000		81.8	67	104				
Surr: Phenol-d5	0.0105		0.03000		35.0	27	58				
Surr: Terphenyl-d14	0.0209		0.02000		104	55	123				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28111**

Sample ID	**MB-28111**	SampType:	**MBLK**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73665**
Client ID:	**PBW**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/29/2018**	SeqNo:	**1842719**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	< 0.0100	0.0100									

Sample ID	**LCS-28111**	SampType:	**LCS**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73665**
Client ID:	**LCSW**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/29/2018**	SeqNo:	**1842722**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.526	0.0100	0.5000	0	105	80	120				

Sample ID	**LCSD-28111**	SampType:	**LCSD**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73665**
Client ID:	**LCSS02**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/29/2018**	SeqNo:	**1842723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.518	0.0100	0.5000	0	104	80	120	0.5260	1.53	20	

Sample ID	**18100762-002DMS**	SampType:	**MS**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73665**
Client ID:	**97692- Cleon Bryant**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/29/2018**	SeqNo:	**1842727**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.542	0.0100	0.5000	0	108	75	125				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28111**

Sample ID **18100762-002DMSD** SampType: **MSD** TestCode: **6010_W** Units: **mg/L** Prep Date: **10/22/2018** RunNo: **73665**

Client ID: **97692- Cleon Bryant** Batch ID: **28111** TestNo: **SW6010B** Analysis Date: **10/29/2018** SeqNo: **1842728**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.531	0.0100	0.5000	0	106	75	125	0.5416	2.03	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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Website: www.element.com

QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC
Project: Approach Environmental - LDNR Residential W **BatchID:** **28111**

Sample ID	**MB-28111**	SampType:	**MBLK**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73612**
Client ID:	**PBW**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/25/2018**	SeqNo:	**1841624**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	< 0.0200	0.0200									

Sample ID	**LCS-28111**	SampType:	**LCS**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73612**
Client ID:	**LCSW**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/25/2018**	SeqNo:	**1841625**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.475	0.0200	0.5000	0	94.9	80	120				

Sample ID	**LCSD-28111**	SampType:	**LCSD**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73612**
Client ID:	**LCSS02**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/25/2018**	SeqNo:	**1841626**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.469	0.0200	0.5000	0	93.9	80	120	0.4747	1.14	20	

Sample ID	**18100762-002DMS**	SampType:	**MS**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73612**
Client ID:	**97692- Cleon Bryant**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/25/2018**	SeqNo:	**1841634**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.466	0.0200	0.5000	0.008500	91.6	75	125				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
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SDL	Sample detection limit	U	Analyte not detected	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28111**

Sample ID **18100762-002DMSD** SampType: **MSD** TestCode: **6010_W** Units: **mg/L** Prep Date: **10/22/2018** RunNo: **73612**

Client ID: **97692- Cleon Bryant** Batch ID: **28111** TestNo: **SW6010B** Analysis Date: **10/25/2018** SeqNo: **1841635**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.486	0.0200	0.5000	0.008500	95.4	75	125	0.4663	4.06	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28111**

Sample ID	**MB-28111**	SampType:	**MBLK**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73540**
Client ID:	**PBW**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/23/2018**	SeqNo:	**1839958**

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									
Chromium	< 0.0100	0.0100									
Lead	< 0.0100	0.0100									
Silver	< 0.00500	0.00500									
Sodium	< 10.0	10.0									

Sample ID	**LCS-28111**	SampType:	**LCS**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73540**
Client ID:	**LCSW**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/23/2018**	SeqNo:	**1839959**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.488	0.0100	0.5000	0	97.6	80	120				
Barium	0.485	0.0100	0.5000	0	97.1	80	120				
Cadmium	0.467	0.00500	0.5000	0	93.4	80	120				
Chromium	0.485	0.0100	0.5000	0	96.9	80	120				
Lead	0.481	0.0100	0.5000	0	96.2	80	120				
Silver	0.0951	0.00500	0.1000	0	95.1	80	120				
Sodium	50.3	10.0	50.00	0	101	80	120				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28111**

Sample ID	**LCSD-28111**	SampType:	**LCSD**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73540**
Client ID:	**LCSS02**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/23/2018**	SeqNo:	**1839960**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.477	0.0100	0.5000	0	95.3	80	120	0.4879	2.32	20	
Barium	0.479	0.0100	0.5000	0	95.9	80	120	0.4854	1.26	20	
Cadmium	0.464	0.00500	0.5000	0	92.9	80	120	0.4672	0.601	20	
Chromium	0.479	0.0100	0.5000	0	95.8	80	120	0.4846	1.18	20	
Lead	0.476	0.0100	0.5000	0	95.3	80	120	0.4812	1.02	20	
Silver	0.0939	0.00500	0.1000	0	93.9	80	120	0.09510	1.27	20	
Sodium	50.7	10.0	50.00	0	101	80	120	50.29	0.792	20	

Sample ID	**18100762-002DMS**	SampType:	**MS**	TestCode:	**6010_W**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73540**
Client ID:	**97692- Cleon Bryant**	Batch ID:	**28111**	TestNo:	**SW6010B**			Analysis Date:	**10/23/2018**	SeqNo:	**1839966**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.504	0.0100	0.5000	0.01130	98.6	75	125				
Barium	0.708	0.0100	0.5000	0.2256	96.5	75	125				
Cadmium	0.477	0.00500	0.5000	0.001200	95.1	75	125				
Chromium	0.484	0.0100	0.5000	0	96.8	75	125				
Lead	0.484	0.0100	0.5000	0	96.8	75	125				
Silver	0.0949	0.00500	0.1000	0	94.9	75	125				
Sodium	202	10.0	50.00	157.3	88.6	75	125				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	RL	Reporting Limit	S	Spike Recovery outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28111**

Sample ID **18100762-002DMSD** SampType: **MSD** TestCode: **6010_W** Units: **mg/L** Prep Date: **10/22/2018** RunNo: **73540**

Client ID: **97692- Cleon Bryant** Batch ID: **28111** TestNo: **SW6010B** Analysis Date: **10/23/2018** SeqNo: **1839967**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.516	0.0100	0.5000	0.01130	101	75	125	0.5042	2.35	20	
Barium	0.719	0.0100	0.5000	0.2256	98.6	75	125	0.7082	1.47	20	
Cadmium	0.480	0.00500	0.5000	0.001200	95.8	75	125	0.4767	0.752	20	
Chromium	0.491	0.0100	0.5000	0	98.3	75	125	0.4840	1.52	20	
Lead	0.486	0.0100	0.5000	0	97.2	75	125	0.4839	0.392	20	
Silver	0.0966	0.00500	0.1000	0	96.6	75	125	0.09490	1.78	20	
Sodium	204	10.0	50.00	157.3	92.4	75	125	201.6	0.938	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	RL	Reporting Limit	S	Spike Recovery outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28113**

Sample ID	**MB-28113**	SampType:	**MBLK**	TestCode:	**HG_W_7470**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73512**
Client ID:	**PBW**	Batch ID:	**28113**	TestNo:	**SW7470A**	**SW7470A**		Analysis Date:	**10/22/2018**	SeqNo:	**1839290**

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-28113**	SampType:	**LCS**	TestCode:	**HG_W_7470**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73512**
Client ID:	**LCSW**	Batch ID:	**28113**	TestNo:	**SW7470A**	**SW7470A**		Analysis Date:	**10/22/2018**	SeqNo:	**1839291**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00962	0.000200	0.01000	0	96.2	80	120				

Sample ID	**LCSD-28113**	SampType:	**LCSD**	TestCode:	**HG_W_7470**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73512**
Client ID:	**LCSS02**	Batch ID:	**28113**	TestNo:	**SW7470A**	**SW7470A**		Analysis Date:	**10/22/2018**	SeqNo:	**1839292**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00975	0.000200	0.01000	0	97.5	80	120	0.009624	1.31	20	

Sample ID	**18100762-001DMS**	SampType:	**MS**	TestCode:	**HG_W_7470**	Units:	**mg/L**	Prep Date:	**10/22/2018**	RunNo:	**73512**
Client ID:	**262- Mason Turner**	Batch ID:	**28113**	TestNo:	**SW7470A**	**SW7470A**		Analysis Date:	**10/22/2018**	SeqNo:	**1839294**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00829	0.000200	0.01000	0	82.9	75	125				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **28113**

Sample ID **18100762-001DMSD** SampType: **MSD** TestCode: **HG_W_7470** Units: **mg/L** Prep Date: **10/22/2018** RunNo: **73512**

Client ID: **262- Mason Turner** Batch ID: **28113** TestNo: **SW7470A** **SW7470A** Analysis Date: **10/22/2018** SeqNo: **1839295**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00872	0.000200	0.01000	0	87.2	75	125	0.008293	4.96	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73467**

Sample ID **MB** SampType: **MBLK** TestCode: **8260_W_REC** Units: **mg/L** Prep Date: RunNo: **73467**

Client ID: **PBW** Batch ID: **R73467** TestNo: **SW8260B** Analysis Date: **10/19/2018** SeqNo: **1838501**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	< 0.00500	0.00500									
1,1,1-Trichloroethane	< 0.00500	0.00500									
1,1,2,2-Tetrachloroethane	< 0.000500	0.000500									
1,1,2-Trichloroethane	< 0.00500	0.00500									
1,1-Dichloroethane	< 0.00500	0.00500									
1,1-Dichloroethene	< 0.00500	0.00500									
1,2-Dibromo-3-chloropropane	< 0.00500	0.00500									
1,2-Dichlorobenzene	< 0.0200	0.0200									
1,2-Dichloroethane	< 0.00500	0.00500									
1,2-Dichloroethene, Total	< 0.00600	0.00600									
1,2-Dichloropropane	< 0.00500	0.00500									
1,3-Dichlorobenzene	< 0.0100	0.0100									
1,4-Dichlorobenzene	< 0.0200	0.0200									
2-Butanone	< 0.0100	0.0100									
4-Methyl-2-pentanone	< 0.0100	0.0100									
Acetone	< 0.0100	0.0100									
Benzene	< 0.00500	0.00500									
Bromodichloromethane	< 0.00500	0.00500									
Bromoform	< 0.00500	0.00500									
Bromomethane	< 0.00500	0.00500									
Carbon disulfide	< 0.0100	0.0100									
Carbon tetrachloride	< 0.00500	0.00500									
Chlorobenzene	< 0.00500	0.00500									
Chlorodibromomethane	< 0.00500	0.00500									
Chloroethane	< 0.0100	0.0100									
Chloroform	< 0.00500	0.00500									

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	RL	Reporting Limit	S	Spike Recovery outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73467**

Sample ID **MB** SampType: **MBLK** TestCode: **8260_W_REC** Units: **mg/L** Prep Date: RunNo: **73467**

Client ID: **PBW** Batch ID: **R73467** TestNo: **SW8260B** Analysis Date: **10/19/2018** SeqNo: **1838501**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	< 0.00500	0.00500									
cis-1,2-Dichloroethene	< 0.00300	0.00300									
cis-1,3-Dichloropropene	< 0.00200	0.00200									
Ethylbenzene	< 0.00500	0.00500									
Isobutyl alcohol	< 0.100	0.100									
Methyl tert-butyl ether	< 0.00500	0.00500									
Methylene chloride	< 0.00500	0.00500									
Styrene	< 0.00500	0.00500									
Tetrachloroethene	< 0.00500	0.00500									
Toluene	< 0.00500	0.00500									
trans-1,2-Dichloroethene	< 0.00300	0.00300									
trans-1,3-Dichloropropene	< 0.00200	0.00200									
Trichloroethene	< 0.00500	0.00500									
Trichlorofluoromethane	< 0.00500	0.00500									
Vinyl chloride	< 0.00200	0.00200									
Xylenes, Total	< 0.0150	0.0150									
Surr: 4-Bromofluorobenzene	0.0304		0.03000		101	65.1	136				
Surr: Dibromofluoromethane	0.0279		0.03000		93.0	40.4	143				
Surr: Toluene-d8	0.0306		0.03000		102	58.2	127				

Sample ID **LCSD 17221A-7** SampType: **LCSD** TestCode: **8260_W_REC** Units: **mg/L** Prep Date: RunNo: **73467**

Client ID: **LCSS02** Batch ID: **R73467** TestNo: **SW8260B** Analysis Date: **10/19/2018** SeqNo: **1838505**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	0.0480	0.00500	0.05000	0	96.0	73.4	120	0.04685	2.40	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	RL	Reporting Limit	S	Spike Recovery outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73467**

Sample ID **LCSD 17221A-7** SampType: **LCSD** TestCode: **8260_W_REC** Units: **mg/L** Prep Date: RunNo: **73467**

Client ID: **LCSS02** Batch ID: **R73467** TestNo: **SW8260B** Analysis Date: **10/19/2018** SeqNo: **1838505**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.0446	0.00500	0.05000	0	89.2	64.5	127	0.04496	0.759	20	
1,1,2,2-Tetrachloroethane	0.0474	0.000500	0.05000	0	94.9	63.6	120	0.04729	0.296	20	
1,1,2-Trichloroethane	0.0453	0.00500	0.05000	0	90.7	74.9	120	0.04502	0.686	20	
1,1-Dichloroethane	0.0451	0.00500	0.05000	0	90.2	67.9	123	0.04268	5.56	20	
1,1-Dichloroethene	0.0439	0.00500	0.05000	0	87.7	60.3	135	0.04270	2.68	20	
1,2-Dibromo-3-chloropropane	0.0490	0.00500	0.05000	0	98.0	56.6	132	0.04840	1.27	20	
1,2-Dichlorobenzene	0.0479	0.0200	0.05000	0	95.8	76.4	120	0.04643	3.07	20	
1,2-Dichloroethane	0.0450	0.00500	0.05000	0	90.0	67.5	124	0.04355	3.30	20	
1,2-Dichloroethene, Total	0.0959	0.00600	0.1000	0	95.9	72.5	122	0.09112	5.14	20	
1,2-Dichloropropane	0.0463	0.00500	0.05000	0	92.5	77.2	120	0.04533	2.03	20	
1,3-Dichlorobenzene	0.0475	0.0100	0.05000	0	95.0	75.1	120	0.04676	1.57	20	
1,4-Dichlorobenzene	0.0477	0.0200	0.05000	0	95.3	76.1	120	0.04577	4.07	20	
2-Butanone	0.0473	0.0100	0.05000	0	94.6	61	127	0.04687	0.934	20	
4-Methyl-2-pentanone	0.0437	0.0100	0.05000	0	87.3	54.1	129	0.04317	1.15	20	
Acetone	0.0773	0.0100	0.1000	0	77.3	52.1	135	0.08184	5.76	20	
Benzene	0.0480	0.00500	0.05000	0	96.0	67.8	125	0.04218	12.9	20	
Bromodichloromethane	0.0461	0.00500	0.05000	0	92.1	72	120	0.04610	0.0868	20	
Bromoform	0.0480	0.00500	0.05000	0	96.1	70.4	121	0.04854	1.04	20	
Bromomethane	0.0458	0.00500	0.05000	0	91.6	41.6	157	0.04386	4.33	20	
Carbon disulfide	0.0450	0.0100	0.05000	0	90.0	52.2	135	0.04324	4.01	20	
Carbon tetrachloride	0.0464	0.00500	0.05000	0	92.9	65.6	125	0.04509	2.95	20	
Chlorobenzene	0.0465	0.00500	0.05000	0	93.0	74.5	120	0.04465	4.06	20	
Chlorodibromomethane	0.0486	0.00500	0.05000	0	97.2	75	120	0.04786	1.51	20	
Chloroethane	0.0412	0.0100	0.05000	0	82.3	49.5	146	0.03988	3.16	20	
Chloroform	0.0447	0.00500	0.05000	0	89.4	71	120	0.04434	0.809	20	
Chloromethane	0.0445	0.00500	0.05000	0	89.0	45.8	145	0.04254	4.50	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
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SDL	Sample detection limit	U	Analyte not detected	W	Sample container temperature is out of limit as sp

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Website: www.element.com

QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73467**

Sample ID **LCSD 17221A-7** SampType: **LCSD** TestCode: **8260_W_REC** Units: **mg/L** Prep Date: RunNo: **73467**

Client ID: **LCSS02** Batch ID: **R73467** TestNo: **SW8260B** Analysis Date: **10/19/2018** SeqNo: **1838505**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	0.0498	0.00300	0.05000	0	99.6	73.8	124	0.04730	5.19	20	
cis-1,3-Dichloropropene	0.0506	0.00200	0.05000	0	101	80	120	0.04960	1.96	20	
Ethylbenzene	0.0513	0.00500	0.05000	0	103	76.9	118	0.04961	3.27	20	
Isobutyl alcohol	0.422	0.100	0.5000	0	84.3	70	130	0.4489	6.25	20	
Methyl tert-butyl ether	0.0500	0.00500	0.05000	0	99.9	62.6	134	0.04768	4.65	20	
Methylene chloride	0.0458	0.00500	0.05000	0	91.6	65.8	125	0.04437	3.15	20	
Styrene	0.0457	0.00500	0.05000	0	91.3	79	120	0.04445	2.69	20	
Tetrachloroethene	0.0468	0.00500	0.05000	0	93.6	68.6	152	0.04432	5.42	20	
Toluene	0.0471	0.00500	0.05000	0	94.2	73.3	120	0.04502	4.52	20	
trans-1,2-Dichloroethene	0.0461	0.00300	0.05000	0	92.2	67.7	124	0.04382	5.09	20	
trans-1,3-Dichloropropene	0.0506	0.00200	0.05000	0	101	79.6	121	0.04932	2.60	20	
Trichloroethene	0.0462	0.00500	0.05000	0	92.5	74.5	124	0.04592	0.716	20	
Trichlorofluoromethane	0.0463	0.00500	0.05000	0	92.5	45.2	142	0.04419	4.58	20	
Vinyl chloride	0.0461	0.00200	0.05000	0	92.3	37.4	174	0.04432	4.02	20	
Xylenes, Total	0.137	0.0150	0.1500	0	91.1	80	120	0.1320	3.50	20	
Surr: 4-Bromofluorobenzene	0.0347		0.03000		116	65.1	136		0	20	
Surr: Dibromofluoromethane	0.0264		0.03000		88.1	40.4	143		0	20	
Surr: Toluene-d8	0.0298		0.03000		99.5	58.2	127		0	20	

Sample ID **LCS 17221A-79** SampType: **LCS** TestCode: **8260_W_REC** Units: **mg/L** Prep Date: RunNo: **73467**

Client ID: **LCSW** Batch ID: **R73467** TestNo: **SW8260B** Analysis Date: **10/19/2018** SeqNo: **1838506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	0.0468	0.00500	0.05000	0	93.7	73.4	120				
1,1,1-Trichloroethane	0.0450	0.00500	0.05000	0	89.9	64.5	127				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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Website: www.element.com

QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73467**

Sample ID **LCS 17221A-79** SampType: **LCS** TestCode: **8260_W_REC** Units: **mg/L** Prep Date: RunNo: **73467**

Client ID: **LCSW** Batch ID: **R73467** TestNo: **SW8260B** Analysis Date: **10/19/2018** SeqNo: **1838506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	0.0473	0.000500	0.05000	0	94.6	63.6	120				
1,1,2-Trichloroethane	0.0450	0.00500	0.05000	0	90.0	74.9	120				
1,1-Dichloroethane	0.0427	0.00500	0.05000	0	85.4	67.9	123				
1,1-Dichloroethene	0.0427	0.00500	0.05000	0	85.4	60.3	135				
1,2-Dibromo-3-chloropropane	0.0484	0.00500	0.05000	0	96.8	56.6	132				
1,2-Dichlorobenzene	0.0464	0.0200	0.05000	0	92.9	76.4	120				
1,2-Dichloroethane	0.0436	0.00500	0.05000	0	87.1	67.5	124				
1,2-Dichloroethene, Total	0.0911	0.00600	0.1000	0	91.1	72.5	122				
1,2-Dichloropropane	0.0453	0.00500	0.05000	0	90.7	77.2	120				
1,3-Dichlorobenzene	0.0468	0.0100	0.05000	0	93.5	75.1	120				
1,4-Dichlorobenzene	0.0458	0.0200	0.05000	0	91.5	76.1	120				
2-Butanone	0.0469	0.0100	0.05000	0	93.7	61	127				
4-Methyl-2-pentanone	0.0432	0.0100	0.05000	0	86.3	54.1	129				
Acetone	0.0818	0.0100	0.1000	0	81.8	52.1	135				
Benzene	0.0422	0.00500	0.05000	0	84.4	67.8	125				
Bromodichloromethane	0.0461	0.00500	0.05000	0	92.2	72	120				
Bromoform	0.0485	0.00500	0.05000	0	97.1	70.4	121				
Bromomethane	0.0439	0.00500	0.05000	0	87.7	41.6	157				
Carbon disulfide	0.0432	0.0100	0.05000	0	86.5	52.2	135				
Carbon tetrachloride	0.0451	0.00500	0.05000	0	90.2	65.6	125				
Chlorobenzene	0.0446	0.00500	0.05000	0	89.3	74.5	120				
Chlorodibromomethane	0.0479	0.00500	0.05000	0	95.7	75	120				
Chloroethane	0.0399	0.0100	0.05000	0	79.8	49.5	146				
Chloroform	0.0443	0.00500	0.05000	0	88.7	71	120				
Chloromethane	0.0425	0.00500	0.05000	0	85.1	45.8	145				
cis-1,2-Dichloroethene	0.0473	0.00300	0.05000	0	94.6	73.8	124				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73467**

Sample ID **LCS 17221A-79** SampType: **LCS** TestCode: **8260_W_REC** Units: **mg/L** Prep Date: RunNo: **73467**

Client ID: **LCSW** Batch ID: **R73467** TestNo: **SW8260B** Analysis Date: **10/19/2018** SeqNo: **1838506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.0496	0.00200	0.05000	0	99.2	80	120				
Ethylbenzene	0.0496	0.00500	0.05000	0	99.2	76.9	118				
Isobutyl alcohol	0.449	0.100	0.5000	0	89.8	70	130				
Methyl tert-butyl ether	0.0477	0.00500	0.05000	0	95.4	62.6	134				
Methylene chloride	0.0444	0.00500	0.05000	0	88.7	65.8	125				
Styrene	0.0445	0.00500	0.05000	0	88.9	79	120				
Tetrachloroethene	0.0443	0.00500	0.05000	0	88.6	68.6	152				
Toluene	0.0450	0.00500	0.05000	0	90.0	73.3	120				
trans-1,2-Dichloroethene	0.0438	0.00300	0.05000	0	87.6	67.7	124				
trans-1,3-Dichloropropene	0.0493	0.00200	0.05000	0	98.6	79.6	121				
Trichloroethene	0.0459	0.00500	0.05000	0	91.8	74.5	124				
Trichlorofluoromethane	0.0442	0.00500	0.05000	0	88.4	45.2	142				
Vinyl chloride	0.0443	0.00200	0.05000	0	88.6	37.4	174				
Xylenes, Total	0.132	0.0150	0.1500	0	88.0	80	120				
Surr: 4-Bromofluorobenzene	0.0348		0.03000		116	65.1	136				
Surr: Dibromofluoromethane	0.0259		0.03000		86.5	40.4	143				
Surr: Toluene-d8	0.0293		0.03000		97.8	58.2	127				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	RL	Reporting Limit	S	Spike Recovery outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC
Project: Approach Environmental - LDNR Residential W **BatchID:** **R73473**

Sample ID **GAS LCS**	SampType: **LCS**	TestCode: **8015_G_W**	Units: **mg/L**	Prep Date:	RunNo: **73473**
Client ID: **LCSW**	Batch ID: **R73473**	TestNo: **SW8015B**		Analysis Date: **10/19/2018**	SeqNo: **1838631**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline Range)	13.5	0.150	12.50	0	108	80	130				

Sample ID **GAS LCSD**	SampType: **LCSD**	TestCode: **8015_G_W**	Units: **mg/L**	Prep Date:	RunNo: **73473**
Client ID: **LCSS02**	Batch ID: **R73473**	TestNo: **SW8015B**		Analysis Date: **10/19/2018**	SeqNo: **1838632**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline Range)	13.3	0.150	12.50	0	107	80	130	13.48	1.23	20	

Sample ID **MBLK**	SampType: **MBLK**	TestCode: **8015_G_W**	Units: **mg/L**	Prep Date:	RunNo: **73473**
Client ID: **PBW**	Batch ID: **R73473**	TestNo: **SW8015B**		Analysis Date: **10/19/2018**	SeqNo: **1838633**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline Range)	0.0986	0.150									J
Surr: alpha, alpha, alpha-Trifluorotoluene	0.0538		0.05000		108	70	130				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
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SDL	Sample detection limit	U	Analyte not detected	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73475**

Sample ID	**MBLK**	SampType:	**MBLK**	TestCode:	**9056_W**	Units:	**mg/L**	Prep Date:		RunNo:	**73475**
Client ID:	**PBW**	Batch ID:	**R73475**	TestNo:	**SW9056A**			Analysis Date:	**10/19/2018**	SeqNo:	**1838658**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	< 0.250	0.250									

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**9056_W**	Units:	**mg/L**	Prep Date:		RunNo:	**73475**
Client ID:	**LCSW**	Batch ID:	**R73475**	TestNo:	**SW9056A**			Analysis Date:	**10/19/2018**	SeqNo:	**1838659**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	9.98	0.250	10.00	0	99.8	80	120				

Sample ID	**LCSD**	SampType:	**LCSD**	TestCode:	**9056_W**	Units:	**mg/L**	Prep Date:		RunNo:	**73475**
Client ID:	**LCSS02**	Batch ID:	**R73475**	TestNo:	**SW9056A**			Analysis Date:	**10/19/2018**	SeqNo:	**1838660**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	9.97	0.250	10.00	0	99.7	80	120	9.984	0.154	15	

Sample ID	**18100747-001AMS**	SampType:	**MS**	TestCode:	**9056_W**	Units:	**mg/L**	Prep Date:		RunNo:	**73475**
Client ID:	**ZZZZZZ**	Batch ID:	**R73475**	TestNo:	**SW9056A**			Analysis Date:	**10/19/2018**	SeqNo:	**1838667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	85,100	1,250	25,000	62,450	90.6	80	120				

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73475**

Sample ID **18100747-001AMSD** SampType: **MSD** TestCode: **9056_W** Units: **mg/L** Prep Date: RunNo: **73475**

Client ID: **ZZZZZZ** Batch ID: **R73475** TestNo: **SW9056A** Analysis Date: **10/19/2018** SeqNo: **1838668**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	84,900	1,250	25,000	62,450	89.7	80	120	85,110	0.262	15	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	RL	Reporting Limit	S	Spike Recovery outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73481**

Sample ID	**MB-R73481**	SampType:	**MBLK**	TestCode:	**TDS_2540C**	Units:	**mg/L**	Prep Date:		RunNo:	**73481**
Client ID:	**PBW**	Batch ID:	**R73481**	TestNo:	**SM2540C**			Analysis Date:	**10/20/2018**	SeqNo:	**1839488**

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									

Sample ID	**LCS-R73481**	SampType:	**LCS**	TestCode:	**TDS_2540C**	Units:	**mg/L**	Prep Date:		RunNo:	**73481**
Client ID:	**LCSW**	Batch ID:	**R73481**	TestNo:	**SM2540C**			Analysis Date:	**10/20/2018**	SeqNo:	**1839489**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filterable)	994	20.0	1,000	0	99.4	85	115				

Sample ID	**LCSD-R73481**	SampType:	**LCSD**	TestCode:	**TDS_2540C**	Units:	**mg/L**	Prep Date:		RunNo:	**73481**
Client ID:	**LCSS02**	Batch ID:	**R73481**	TestNo:	**SM2540C**			Analysis Date:	**10/20/2018**	SeqNo:	**1839490**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filterable)	989	20.0	1,000	0	98.9	85	115	994.0	0.504	10	

Sample ID	**18100762-002FDUP**	SampType:	**DUP**	TestCode:	**TDS_2540C**	Units:	**mg/L**	Prep Date:		RunNo:	**73481**
Client ID:	**97692- Cleon Bryant**	Batch ID:	**R73481**	TestNo:	**SM2540C**			Analysis Date:	**10/20/2018**	SeqNo:	**1839497**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filterable)	542	20.0						537.0	0.927	10	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
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SDL	Sample detection limit	U	Analyte not detected	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **18100762**

06-Nov-18

Client: Approach Environmental, LLC

Project: Approach Environmental - LDNR Residential W **BatchID:** **R73481**

Sample ID	**18100762-002FDUP**	SampType:	**DUP**	TestCode:	**TDS_2540C**	Units:	**mg/L**	Prep Date:		RunNo:	**73481**
Client ID:	**97692- Cleon Bryant**	Batch ID:	**R73481**	TestNo:	**SM2540C**			Analysis Date:	**10/20/2018**	SeqNo:	**1839497**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Matrix Interference
ND	Not Detected at the Reporting Limit	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 sp

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Sample Log-In Check List

Client Name: **APPROACH_ENVIRONM** Work Order Number: **18100762** RcptNo: **1**

Logged by:	**Savanah Vila**	**10/19/2018 7:20:00 AM**	
Completed By:	**Savanah Vila**	**10/19/2018 8:48:55 AM**	
Reviewed By:	**Caitlin Duplantis**	**10/19/2018 10:48:55 AM**	

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☑ Not Present ☐
2. How was the sample delivered? FedEx
   Tracking No.: 783326364297

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: Date
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:
    Container information for trip blank added to COC.

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Not Present			

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 11/06/2018

GCAL Report 218102415

Project 18100762

Deliver To	***Additional Recipients***
Annie Reedy	Caitlin Duplantis, Element Materials Technology
Element Materials Technology	Cristina Thibeaux, Element Materials Technology
2417 W Pinhook Rd	Rhonda David, Element Materials Technology
Lafayette, LA 70508	Buffy Hudson, Element Materials Technology
800-737-2378	

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
CF	HPLC or GC Confirmation
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	Organics **-** The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%
L	Reporting Limits adjusted to meet risk-based limit.
P	RPD between primary and confirmation result is greater than 40
DL	Diluted analysis – when appended to Client Sample ID

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Robyn Migues/Dir of Data Del

Authorized Signature
GCAL Report 218102415

Certifications

Certification	Certification Number
DOD ELAP	L16-398-R5
Alabama	01955
Arkansas	18-062-0
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
Washington	C929
USDA Soil Permit	P330-16-00234

Case Narrative

Client: Element Materials Technology **Report:** 218102415

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

This report is revised 11/06/18. Sample 21810241502 (97692 - Clean Brya) is moved to report 218110616.

No anomalies were found for the analyzed sample(s).

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21810241501	262-Mason Turner	Water	10/18/2018 10:30	10/23/2018 12:36

Sample Results

262-Mason Turner	**Collect Date**	10/18/2018 10:30	**GCAL ID**	21810241501
	Receive Date	10/23/2018 12:36	**Matrix**	Water

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	30	10/30/2018 15:24	JAR	646914

CAS#	Parameter	Result	LOQ	Units
74-82-8	Methane	482	60.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.50	Diluted Out	ug/L	0*	40 - 143

GC Volatiles QC Summary

Analytical Batch 646914	Client ID	MB646914		LCS646914				LCSD646914				
	GCAL ID	1863230		1863231				1863232				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/30/2018 12:14		10/30/2018 12:14				10/30/2018 12:30				
	Matrix	Water		Water				Water				
EPA RSK-175		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Methane	74-82-8	ND	2.00	17.5	13.5	77	39 - 120	17.5	13.3	76	1	27
Surrogate												
Propene	115-07-1	29.1	72	40.5	25.7	63	40 - 143	40.5	25.2	62	NA	NA

element

CHAIN OF CUSTODY RECORD

Omega COCID 7716 | PAG

Client ID: 4462 - Element Materials Technology
SDG: 218102415
PM: JLM

TEL: (337) 233-0483
FAX: (337) 233-6540
Website: www.element.com

SUB CONTRATOR: GCAL	COMPANY: Gulf Coast
ADDRESS: 7979 GSRI Avenue	
CITY, STATE, ZIP: Baton Rouge, LA 70820	
PHONE: (225) 769-4900	FAX: (225) 767-5717 EMAIL:
ACCOUNT #:	

SPECIAL INSTRUCTIONS / COMMENTS:
dissolved methane by RSK175

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.
1	18100762-001H RSK-175	262- Mason Turner	VOAU	Water	10/18/2018 10:30:00 AM	2	-1
2	~~18100762-002H~~ ~~RSK-175~~ CCT 11/6/18	~~97692- Clean Brya~~	VOAU	Water	10/18/2018 3:00:00 PM	2	-2

Relinquished By:	Date: 10/22/2018	Time: 4:31 PM	Received By:	Date: 10-22-18	Time: 1631
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date: 10-23-18	Time: 1236	Received By:	Date: 10-23-18	Time: 1236

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

Note: RUSH requests will incur surcharges!

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

28CPM E29

FOR LAB USE ONLY
Temp of samples 0.3 °C Attempt to Cool? ice
Comments:

SAMPLE RECEIVING CHECKLIST

218102415

SAMPLE DELIVERY GROUP 218102415	
Client **PM** JLM 4462 - Element Materials Technology	**Transport Method** CUST
Profile Number 271810	**Received By** Savage, Tiffany R
Line Item(s) 1 - Water	**Receive Date(s)** 10/23/18

CHECKLIST	YES	NO
Samples received with proper thermal preservation?	☑	☐
Radioactivity is <1600 cpm? If no, record cpm value in notes section.	☑	☐
COC relinquished and complete (including sampleIDs, collect times, and sampler)?	☑	☐
All containers received in good condition and within hold time?	☑	☐
All sample labels and containers received match the chain of custody?	☑	☐
Preservative added to any containers?	☐	☑
If received, was headspace for VOC water containers < 6mm?	☑	☐
Samples collected in containers provided by GCAL?	☐	☑

COOLERS

Airbill	Thermometer ID: E29	Temp °C
		0.3

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.6

Page 1 of 1

element

Chain of Custody

Laboratory Number: 18100762

Client Information:	Billing Information:	PO Number:	Project Name/Number:	Page of
Company Name: Approach Environmental	Same		Approach Environmental - LDNR Residential Water Wells CCT 10/24/18	**Matrix Code**
Contact Name: Mark Moore		Quote Number:		DW = Drinking Water
Address: 1000 Grimmett Dr.			Sampler's Signature	WW = Waste Water
		Required QC Level		GW = Ground Water
City, State Zip: Shreveport, La 71107				AQ = Aqueous
Phone Number: Ext:	Ext:	Bill Monthly ☐Yes ☐No	Shipping Method: UPS / FedEx / NOW DHL / ~~Element~~ / Hand / Mail 10-19-18 SV	OT = Other 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
Fax Number:				
E-mail Address: MSMoore@approachenv.com				

Which Regulations Apply: ☐RCRA ☐Drinking Water ☐POTW ☐Distribution ☐NPDES ☐Special ☐USDA/FDA ☐State ☐RECAP/RISC ☐Other

Turn Time ☐Standard RUSH ☐1 Day ☑2 Day ☐Other (Rush turn times will incur a surcharge and must be pre-approved by lab.)

Sample ID/Description	Collection Information: Date	Time	Grab / Composite	Matrix	Container: Quantity	Container: Type P=Plastic, G=Glass, V=Vial	Pres. HCl, HNO_3, H_2SO_4, NaOH, $Na_2S_2O_3$	VOC-8260	Semivoc-8270	RCRA Metals	TDS	TPH-GDO	Dissolved Methane	Sodium	Chlorides	Comments
262-Mason Turner	10/18/18	1030	G	W	13	P,G	HCl, HNO_3									48-hr Rush on voc's * Method detection Limits as we discussed. We need a # for the results DD 10/18/18 e/s on cooler
Trip Blank	↓	—	G	W	3	V	HCl									

10-19-18 SV

TRACKING NO 783326364297

	Relinquished by	Date/Time	Received by	Date/Time
1		10/18/18 645	FedEx	10/18/18
2	Fed Ex	10/19/18 7:20a		10/19/18 7:20a
3				10-19-18 0720

Field Notes:

Received at lab on ice? ☑Yes ☐No Temp: 4.9 CCT IR10

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.

8800 North US 31, Columbus, IN 47201 USA, P 812-375-0531, F 812-375-0731
328 Ley Road, Suite 100, Fort Wayne, IN 46825 USA, P 260-471-7000, F 260-471-7777
909 Executive Dr, Warsaw, IN 46580 USA, P 574-267-3305, F 574-269-6569
3371 Cleveland Road, Suite 100A, South Bend, IN 46628 USA, P 574-277-0707, F 574-273-5699
2417 W. Pinhook Rd, Lafayette, LA 70508 USA, P 337-235-0483, F 337-233-6540