APPROVED
By Olivia Yu at 10:41 am, Jun 12, 2018

NMOCD approves of the delineation completed for 1RP-3327. No remediation is required. Closure is granted for 1RP-3327.

1RP-3327
DELINEATION REPORT
Wallingford Well #3 LSE
Crude Oil Spill
Lea County, New Mexico

Latitude: 32.7956°
Longitude: -103.7897°

LAI Project No. 17-0175-10

March 7, 2018

Prepared for:
Legacy Reserves Operating, LP
303 West Wall Street, Suite 1300
Midland, Texas 79701

Prepared by:
Larson & Associates, Inc.
507 North Marienfeld Street, Suite 205
Midland, Texas 79701

Mark J. Larson, P.G.
Certified Professional Geologist #10490

Sarah R. Johnson
Staff Geologist

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1.0 INTRODUCTION

Larson & Associates, Inc. (LAI) has prepared this delineation report on behalf of Legacy Reserves, Operating, LP (Legacy) for submittal to the New Mexico Oil Conservation Division (OCD) District 1 and New Mexico State Land Office (SLO) for a crude oil spill at the Wallingford Well #3 LSE (Site) located in Unit C (NE/4, NW/4), Section 32, Township 17 South, Range 32 East, in Lea County, New Mexico. The geodetic position is North 32.7956° and West -103.7897°. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The spill occurred on August 31, 2014, due to a leak in a flowline, releasing about 2 barrels (bbl) of crude oil. No liquids were recovered. The crude oil was released as a spray and restricted to the pasture adjacent to the highway. The well was shut in and the flowline was replaced. The contaminated soil was removed from the Site and clean soil was put in its place. The initial C-141 was submitted on September 2, 2014 and assigned remediation permit number 1RP-3327. Appendix A presents the initial C-141.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,915 feet above mean sea level (msl);
- The topography slopes gradually towards the southeast and southwest;
- The nearest surface water is a seasonal playa approximately 0.2 miles southwest of the Site;
- The soils are designated as “Kermit soils and dune land, 0 to 12 percent slopes”, consisting of 0 to 60 inches of fine sand;
- The surface geology is Eolian and Piedmont deposits from the Holocene to middle Pleistocene, the deposits consist of interlayed eolian sands and piedmont-slope deposits underlain by the Tertiary-age Blackwater Draw and Ogallala formations in descending order;
- Groundwater occurs in the Ogallala formation at approximately 80 feet below ground surface (bgs) (1996);
- The nearest freshwater well is located in Unit P (SE/4, SE/4), Section 7, Township 18 South, Range 32 East, approximately 2.75 miles southwest of the Site.

1.2 Remediation Action Levels

The remediation action levels (RRAL) were calculated for benzene, BTEX and TPH based on the following criteria established by the OCD in “*Guidelines for Remediation of Leaks, Spills and Releases, pp. 6 – 7, August 13, 1993”:*

Criteria	***Result***	***Score***
Depth-to-Groundwater	50 – 99 Feet	10
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1000 Horizontal Feet	0

The following RRAL apply to the release ranking score: 10

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 1,000 mg/Kg

Depth to groundwater between 50 and 99 feet bgs requires vertical delineation for chloride to 600 milligrams per kilogram (mg/Kg) and maintained a minimum 5 feet farther in depth.

2.0 DELINEATION

On February 13, 2018 LAI personnel collected soil samples at seven (7) locations (DP-1 through DP-7), with direct push technology (DPT) to about 8 feet bgs. The samples were delivered under preservation and chain of custody to Xenco Laboratories (Xenco) in Midland, Texas where the upper samples (i.e. 0 to 1) were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons (TPH) including gasoline range organics (GRO), diesel range organics (DRO) and oil range organics (ORO) by EPA SW-846 Methods 8015M and 8015B respectively. All samples were analyzed for chloride by EPA SW-846 Method 300. BTEX and TPH reported below the RRAL of 50 mg/Kg and 100 mg/Kg in all samples. Chloride reported below the delineation limit of 600 mg/Kg in all samples. Table 1 presents the laboratory analytical data summary. Appendix B presents laboratory reports. Appendix C presents photographs.

3.0 CONCLUSION

Legacy requests no further action for 1RP-3327.

Figures

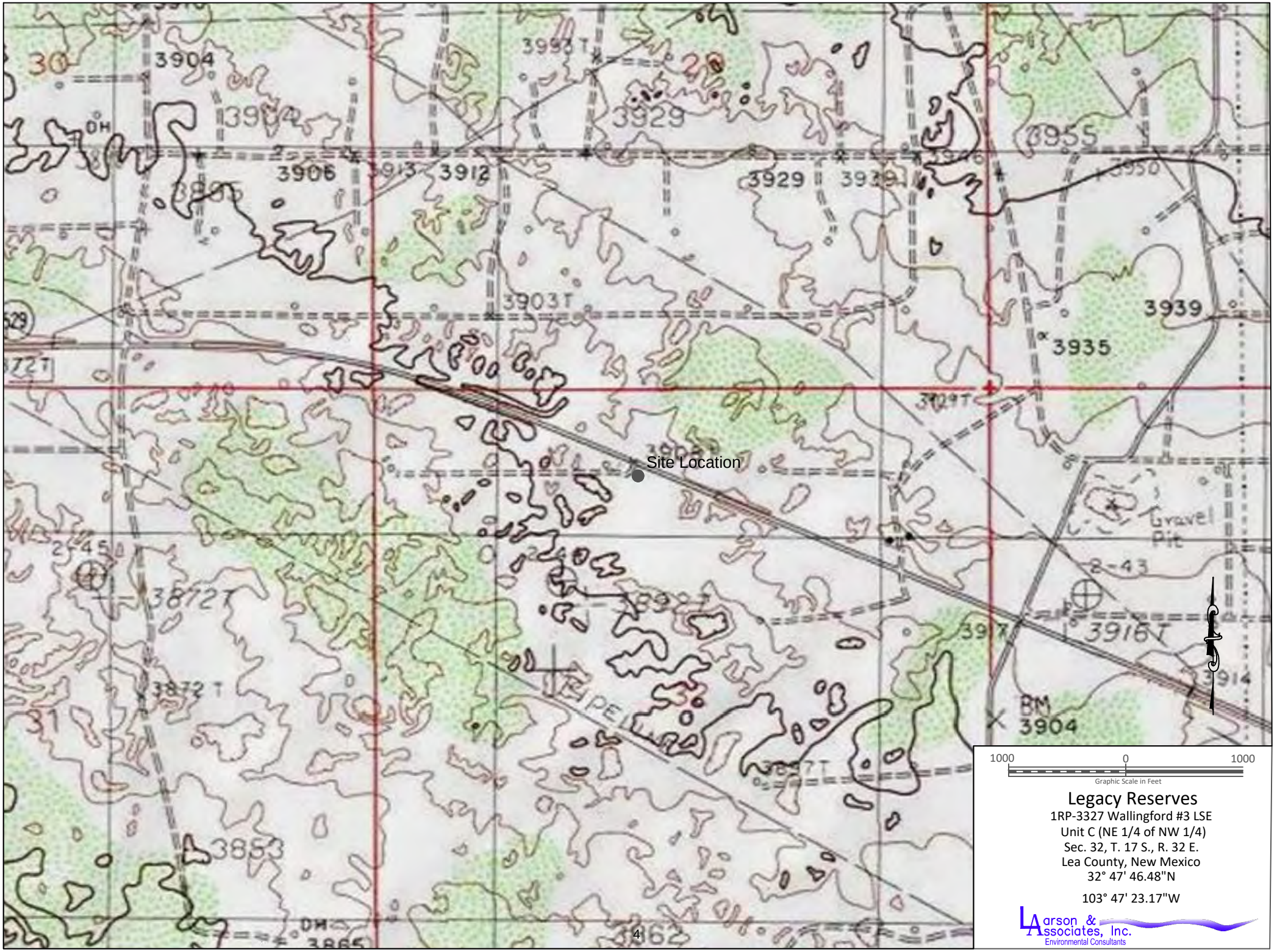

Figure 1 - Topographic Map

Figure 3 - Aerial Map with Soil Sample Location

Tables

1RP-3327
Soil Sample Analytical Data Summary
Legacy Reserves Operating, LP
Wallingford #3 LSE
Lea County, New Mexico

Sample	Depth (Feet)	Collection Date	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
RRAL:			**10**	**50**				**1,000**	**600***
Soil Samples									
DP-1	0 - 1	2/13/2018	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<4.90
	1 - 2	2/13/2018	--	--	--	--	--	--	<4.92
	2 - 3	2/13/2018	--	--	--	--	--	--	<4.90
	3 - 4	2/13/2018	--	--	--	--	--	--	<4.95
	4 - 6	2/13/2018	--	--	--	--	--	--	<4.90
	6 - 8	2/13/2018	--	--	--	--	--	--	<4.91
DP-2	0 - 1	2/13/2018	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	<4.98
	1 - 2	2/13/2018	--	--	--	--	--	--	<4.93
	2 - 3	2/13/2018	--	--	--	--	--	--	<4.91
	3 - 4	2/13/2018	--	--	--	--	--	--	<4.93
	4 - 6	2/13/2018	--	--	--	--	--	--	<4.96
	6 - 8	2/13/2018	--	--	--	--	--	--	<4.92
DP-3	0 - 1	2/13/2018	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<4.98
	1 - 2	2/13/2018	--	--	--	--	--	--	<4.90
	2 - 3	2/13/2018	--	--	--	--	--	--	<4.95
	3 - 4	2/13/2018	--	--	--	--	--	--	<4.92
	4 - 6	2/13/2018	--	--	--	--	--	--	<5.03
	6 - 8	2/13/2018	--	--	--	--	--	--	<4.89
DP-4	0 - 1	2/13/2018	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<4.90
	1 - 2	2/13/2018	--	--	--	--	--	--	<4.91
	2 - 3	2/13/2018	--	--	--	--	--	--	<5.00
	3 - 4	2/13/2018	--	--	--	--	--	--	<4.90
	4 - 6	2/13/2018	--	--	--	--	--	--	<4.89
	6 - 8	2/13/2018	--	--	--	--	--	--	<4.94
DP-5	0 - 1	2/13/2018	<0.00200	<0.200	<15.0	<15.0	<15.0	<15.0	<4.90
	1 - 2	2/13/2018	--	--	--	--	--	--	<4.94
	2 - 3	2/13/2018	--	--	--	--	--	--	<4.87
	3 - 4	2/13/2018	--	--	--	--	--	--	<4.92
	4 - 6	2/13/2018	--	--	--	--	--	--	<4.94
	6 - 8	2/13/2018	--	--	--	--	--	--	<4.90
DP-6	0 - 1	2/13/2018	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<4.92
	1 - 2	2/13/2018	--	--	--	--	--	--	<4.90

1RP-3327
Soil Sample Analytical Data Summary
Legacy Reserves Operating, LP
Wallingford #3 LSE
Lea County, New Mexico

Sample	Depth (Feet)	Collection Date	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
RRAL:			**10**	**50**				**1,000**	**600**
Soil Samples									
DP-6	2 - 3	2/13/2018	--	--	--	--	--	--	<4.89
	3 - 4	2/13/2018	--	--	--	--	--	--	<5.00
	4 - 6	2/13/2018	--	--	--	--	--	--	<4.95
	6 - 8	2/13/2018	--	--	--	--	--	--	<4.93
DP-7	0 - 1	2/13/2018	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<5.03
	1 - 2	2/13/2018	--	--	--	--	--	--	<4.97
	2 - 3	2/13/2018	--	--	--	--	--	--	<5.00
	3 - 4	2/13/2018	--	--	--	--	--	--	<5.01
	4 - 6	2/13/2018	--	--	--	--	--	--	<5.00
	6 - 8	2/13/2018	--	--	--	--	--	--	<4.95

Notes: Laboratory analysis performed by Permian Basin Environmental Lab, Midland, Texas, by SW-846 Method 8021B (BTEX), Method 8015M (GRO, DRO and ORO) and Method 300 (chloride).

Depth in feet below ground surface (bgs)

mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)

--: No data available (no sample in sampler)

*: OCD delineation limit

Appendix A
Initial & Final C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

HOBBS OCD Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in Accordance with 19.15.29 NMAC.

SEP 16 2014

RECEIVED

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company – Legacy Reserves	Contact – Brain Cunningham
Address – 303 W. Main St.	Telephone No. -
Facility Name – Wallingford #3 LSE	Facility Type

Surface Owner – Federal	Mineral Owner – Federal	API No. 30-025-7292

27292

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	32	17S	32E	990	North	2310	West	Lea

Latitude 32.7956 **Longitude** -103.7897

NATURE OF RELEASE

Type of Release - Crude	Volume of Release 2 bbl	Volume Recovered 0
Source of Release flow line	Date and Hour of Occurrence 8/31/14	Date and Hour of Discovery 8/31/14 1800hrs
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Flow line developed a small leak. The well was immediately shut in.

Describe Area Affected and Cleanup Action Taken.*

The area that was affected was predominately on a old location with minimal spray in the pasture adjacent to the highway. The flow line was replaced. The contaminated soil was removed and disposed of at a licensed disposal. Fresh soil was put back in.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Brian Cunningham	OIL CONSERVATION DIVISION
Printed Name: Brian Cunningham	Approved by Environmental Specialist:
Title: Production Foreman	Approval Date: 9-16-14 Expiration Date: —
E-mail Address: bcunningham@legacylp.com	Conditions of Approval: — Attached ☐ IRP-3327
Date: 9/2/14 Phone: 432 234 9450	

* Attach Additional Sheets If Necessary

SEP 16 2014

ogrid 240974
API 30-025-95303
API 30-025-95421

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Legacy Reserves Operating, LP	Contact: Brian Cunningham
Address: 303 W. Wall Street, Suite 1300 Midland, TX 79701	Telephone No. 432-234-9450
Facility: Wallingford #3 LSE	Facility Type: Wellhead

Surface Owner: State	Mineral Owner: State	API No. 30-025-27292

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	32	17S	32E	990	North	2310	West	Lea County

Latitude 32.7956° **Longitude** -103.7897°

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release: 2 bbl	Volume Recovered: 0 bbl
Source of Release: flow line	Date and Hour of Occurrence 8/31/2017	Date and Hour of Discovery 8/31/14 1800hrs
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

APPROVED
By Olivia Yu at 10:31 am, Jun 12, 2018

Describe Cause of Problem and Remedial Action Taken.*

Flow line developed a small leak. The well was immediately shut in.

Describe Area Affected and Cleanup Action Taken.*

The crude oil was released as a spray and restricted to the pasture adjacent to the highway. The well was shut in and the flowline was replaced. The contaminated soil was removed from the site and clean soil was put in its place. Soil samples were collected from seven (7) locations within the spill area to a depth of about 8 feet below ground surface (bgs). The samples were analyzed for BTEX, TPH and chloride and reported below the OCD recommended action levels of 10 mg/Kg (benzene), 50 mg/kg (BTEX) and 1,000 mg/Kg (TPH). Chloride was below the OCD delineation limit of 600 mg/Kg.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Brian Cunningham	OIL CONSERVATION DIVISION
Printed Name: Brian Cunningham	Approved by Environmental Specialist:
Title: Production Foreman	Approval Date: 6/12/2018 Expiration Date: xx/xx/xxxx
E-mail Address: bcunningham@legacylp.com	Conditions of Approval: Attached ☐
Date: 2/26/18 Phone: (432) 234-9450	

* Attach Additional Sheets If Necessary

1RP-3327

Appendix B
Analytical Reports

Certificate of Analysis Summary 576373

Larson & Associates, Midland, TX

Project Name: Wallingford #3

Project Id: 17-0175-10
Contact: Sarah Johnson
Project Location: Wallingford #3

Date Received in Lab: Wed Feb-14-18 09:13 am
Report Date: 23-FEB-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	576373-001		576373-002		576373-003		576373-004		576373-005		576373-006	
	Field Id:	DP-1 (0-1)		DP-1 (1-2)		DP-1 (2-3)		DP-1 (3-4)		DP-1 (4-6)		DP-1 (6-8)	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-18 11:45		Feb-13-18 11:49		Feb-13-18 11:51		Feb-13-18 11:54		Feb-13-18 11:56		Feb-13-18 11:58	
BTEX by EPA 8021B	***Extracted:***	Feb-17-18 07:45											
	Analyzed:	Feb-17-18 15:03											
	Units/RL:	mg/kg	RL										
Benzene		<0.00200	0.00200										
Toluene		<0.00200	0.00200										
Ethylbenzene		<0.00200	0.00200										
m,p-Xylenes		<0.00399	0.00399										
o-Xylene		<0.00200	0.00200										
Total Xylenes		<0.00200	0.00200										
Total BTEX		<0.00200	0.00200										
Chloride by EPA 300	***Extracted:***	Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00	
	Analyzed:	Feb-22-18 15:26		Feb-22-18 15:40		Feb-22-18 15:48		Feb-22-18 15:55		Feb-22-18 16:02		Feb-22-18 16:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.90	4.90	<4.92	4.92	<4.90	4.90	<4.95	4.95	<4.90	4.90	<4.91	4.91
TPH By SW8015 Mod	***Extracted:***	Feb-15-18 08:00											
	Analyzed:	Feb-15-18 19:27											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons		<15.0	15.0										
Diesel Range Organics		<15.0	15.0										

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 576373

Larson & Associates, Midland, TX

Project Name: Wallingford #3

Project Id: 17-0175-10
Contact: Sarah Johnson
Project Location: Wallingford #3

Date Received in Lab: Wed Feb-14-18 09:13 am
Report Date: 23-FEB-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	576373-007		576373-008		576373-009		576373-010		576373-011		576373-012	
	Field Id:	DP-2 (0-1)		DP-2 (1-2)		DP-2 (2-3)		DP-2 (3-4)		DP-2 (4-6)		DP-2 (6-8)	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-18 12:02		Feb-13-18 12:04		Feb-13-18 12:06		Feb-13-18 12:08		Feb-13-18 12:10		Feb-13-18 12:12	
BTEX by EPA 8021B	***Extracted:***	Feb-17-18 07:45											
	Analyzed:	Feb-17-18 15:22											
	Units/RL:	mg/kg	RL										
Benzene		<0.00201	0.00201										
Toluene		<0.00201	0.00201										
Ethylbenzene		<0.00201	0.00201										
m,p-Xylenes		<0.00402	0.00402										
o-Xylene		<0.00201	0.00201										
Total Xylenes		<0.00201	0.00201										
Total BTEX		<0.00201	0.00201										
Chloride by EPA 300	***Extracted:***	Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00	
	Analyzed:	Feb-22-18 16:32		Feb-22-18 16:39		Feb-22-18 16:46		Feb-22-18 16:54		Feb-22-18 17:01		Feb-22-18 17:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.98	4.98	<4.93	4.93	<4.91	4.91	<4.93	4.93	<4.96	4.96	<4.92	4.92
TPH By SW8015 Mod	***Extracted:***	Feb-15-18 08:00											
	Analyzed:	Feb-15-18 19:52											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons		<14.9	14.9										
Diesel Range Organics		<14.9	14.9										

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 576373

Larson & Associates, Midland, TX

Project Name: Wallingford #3

Project Id: 17-0175-10
Contact: Sarah Johnson
Project Location: Wallingford #3

Date Received in Lab: Wed Feb-14-18 09:13 am
Report Date: 23-FEB-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	576373-013		576373-014		576373-015		576373-016		576373-017		576373-018	
	Field Id:	DP-4 (0-1)		DP-4 (1-2)		DP-4 (2-3)		DP-4 (3-4)		DP-4 (4-6)		DP-4 (6-8)	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-18 13:44		Feb-13-18 13:46		Feb-13-18 13:48		Feb-13-18 13:50		Feb-13-18 13:52		Feb-13-18 13:54	
BTEX by EPA 8021B	***Extracted:***	Feb-17-18 07:45											
	Analyzed:	Feb-17-18 15:41											
	Units/RL:	mg/kg	RL										
Benzene		<0.00202	0.00202										
Toluene		<0.00202	0.00202										
Ethylbenzene		<0.00202	0.00202										
m,p-Xylenes		<0.00404	0.00404										
o-Xylene		<0.00202	0.00202										
Total Xylenes		<0.00202	0.00202										
Total BTEX		<0.00202	0.00202										
Chloride by EPA 300	***Extracted:***	Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00		Feb-21-18 16:00	
	Analyzed:	Feb-22-18 17:23		Feb-22-18 17:30		Feb-22-18 17:38		Feb-22-18 18:00		Feb-22-18 18:07		Feb-22-18 18:14	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.90	4.90	<4.91	4.91	<5.00	5.00	<4.90	4.90	<4.89	4.89	<4.94	4.94
TPH By SW8015 Mod	***Extracted:***	Feb-15-18 08:00											
	Analyzed:	Feb-15-18 20:18											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons		<15.0	15.0										
Diesel Range Organics		<15.0	15.0										

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 576373

Larson & Associates, Midland, TX

Project Name: Wallingford #3

Project Id: 17-0175-10
Contact: Sarah Johnson
Project Location: Wallingford #3

Date Received in Lab: Wed Feb-14-18 09:13 am
Report Date: 23-FEB-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	576373-019		576373-020		576373-021		576373-022		576373-023		576373-024	
	Field Id:	DP-5 (0-1)		DP-5 (1-2)		DP-5 (2-3)		DP-5 (3-4)		DP-5 (4-6)		DP-5 (6-8)	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-18 14:00		Feb-13-18 14:02		Feb-13-18 14:04		Feb-13-18 14:06		Feb-13-18 14:08		Feb-13-18 14:10	
BTEX by EPA 8021B	***Extracted:***	Feb-17-18 07:45											
	Analyzed:	Feb-17-18 16:00											
	Units/RL:	mg/kg	RL										
Benzene		<0.00200	0.00200										
Toluene		<0.00200	0.00200										
Ethylbenzene		<0.00200	0.00200										
m,p-Xylenes		<0.00401	0.00401										
o-Xylene		<0.00200	0.00200										
Total Xylenes		<0.00200	0.00200										
Total BTEX		<0.00200	0.00200										
Chloride by EPA 300	***Extracted:***	Feb-21-18 16:00		Feb-21-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00	
	Analyzed:	Feb-22-18 18:22		Feb-22-18 18:29		Feb-22-18 19:13		Feb-22-18 19:28		Feb-22-18 19:35		Feb-22-18 19:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.90	4.90	<4.94	4.94	<4.87	4.87	<4.92	4.92	<4.94	4.94	<4.90	4.90
TPH By SW8015 Mod	***Extracted:***	Feb-16-18 17:00											
	Analyzed:	Feb-16-18 23:44											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons		<15.0	15.0										
Diesel Range Organics		<15.0	15.0										

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 576373

Larson & Associates, Midland, TX

Project Name: Wallingford #3

Project Id: 17-0175-10
Contact: Sarah Johnson
Project Location: Wallingford #3

Date Received in Lab: Wed Feb-14-18 09:13 am
Report Date: 23-FEB-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	576373-025		576373-026		576373-027		576373-028		576373-029		576373-030	
	Field Id:	DP-6 (0-1)		DP-6 (1-2)		DP-6 (2-3)		DP-6 (3-4)		DP-6 (4-6)		DP-6 (6-8)	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-18 14:14		Feb-13-18 14:16		Feb-13-18 14:18		Feb-13-18 14:20		Feb-13-18 14:22		Feb-13-18 14:24	
BTEX by EPA 8021B	***Extracted:***	Feb-17-18 07:45											
	Analyzed:	Feb-17-18 16:19											
	Units/RL:	mg/kg	RL										
Benzene		<0.00199	0.00199										
Toluene		<0.00199	0.00199										
Ethylbenzene		<0.00199	0.00199										
m,p-Xylenes		<0.00398	0.00398										
o-Xylene		<0.00199	0.00199										
Total Xylenes		<0.00199	0.00199										
Total BTEX		<0.00199	0.00199										
Chloride by EPA 300	***Extracted:***	Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00	
	Analyzed:	Feb-22-18 19:50		Feb-22-18 19:57		Feb-22-18 20:19		Feb-22-18 20:27		Feb-22-18 20:34		Feb-22-18 20:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.92	4.92	<4.90	4.90	<4.89	4.89	<5.00	5.00	<4.95	4.95	<4.93	4.93
TPH By SW8015 Mod	***Extracted:***	Feb-16-18 17:00											
	Analyzed:	Feb-17-18 00:07											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons		<15.0	15.0										
Diesel Range Organics		<15.0	15.0										

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 576373

Larson & Associates, Midland, TX

Project Name: Wallingford #3

Project Id: 17-0175-10
Contact: Sarah Johnson
Project Location: Wallingford #3

Date Received in Lab: Wed Feb-14-18 09:13 am
Report Date: 23-FEB-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	576373-031		576373-032		576373-033		576373-034		576373-035		576373-036	
	Field Id:	DP-3 (0-1)		DP-3 (1-2)		DP-3 (2-3)		DP-3 (3-4)		DP-3 (4-6)		DP-3 (6-8)	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-18 15:18		Feb-13-18 15:20		Feb-13-18 15:22		Feb-13-18 15:24		Feb-13-18 15:26		Feb-13-18 15:28	
BTEX by EPA 8021B	***Extracted:***	Feb-17-18 07:45											
	Analyzed:	Feb-17-18 16:38											
	Units/RL:	mg/kg	RL										
Benzene		<0.00200	0.00200										
Toluene		<0.00200	0.00200										
Ethylbenzene		<0.00200	0.00200										
m,p-Xylenes		<0.00399	0.00399										
o-Xylene		<0.00200	0.00200										
Total Xylenes		<0.00200	0.00200										
Total BTEX		<0.00200	0.00200										
Chloride by EPA 300	***Extracted:***	Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00	
	Analyzed:	Feb-22-18 20:49		Feb-22-18 21:03		Feb-22-18 21:11		Feb-22-18 21:18		Feb-22-18 21:25		Feb-22-18 21:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.98	4.98	<4.90	4.90	<4.95	4.95	<4.92	4.92	<5.03	5.03	<4.89	4.89
TPH By SW8015 Mod	***Extracted:***	Feb-16-18 17:00											
	Analyzed:	Feb-17-18 01:08											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons		<15.0	15.0										
Diesel Range Organics		<15.0	15.0										

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 576373

Larson & Associates, Midland, TX

Project Name: Wallingford #3

Project Id: 17-0175-10
Contact: Sarah Johnson
Project Location: Wallingford #3

Date Received in Lab: Wed Feb-14-18 09:13 am
Report Date: 23-FEB-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	576373-037		576373-038		576373-039		576373-040		576373-041		576373-042	
	Field Id:	DP-7 (0-1)		DP-7 (1-2)		DP-7 (2-3)		DP-7 (3-4)		DP-7 (4-6)		DP-7 (6-8)	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-18 15:32		Feb-13-18 15:34		Feb-13-18 15:36		Feb-13-18 15:38		Feb-13-18 15:40		Feb-13-18 15:42	
BTEX by EPA 8021B	***Extracted:***	Feb-17-18 07:45											
	Analyzed:	Feb-17-18 16:57											
	Units/RL:	mg/kg	RL										
Benzene		<0.00199	0.00199										
Toluene		<0.00199	0.00199										
Ethylbenzene		<0.00199	0.00199										
m,p-Xylenes		<0.00398	0.00398										
o-Xylene		<0.00199	0.00199										
Total Xylenes		<0.00199	0.00199										
Total BTEX		<0.00199	0.00199										
Chloride by EPA 300	***Extracted:***	Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 16:00		Feb-22-18 17:00		Feb-22-18 17:00	
	Analyzed:	Feb-22-18 21:55		Feb-22-18 22:02		Feb-22-18 22:09		Feb-22-18 22:17		Feb-22-18 23:01		Feb-22-18 23:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<5.03	5.03	<4.97	4.97	<5.00	5.00	<5.01	5.01	<5.00	5.00	<4.95	4.95
TPH By SW8015 Mod	***Extracted:***	Feb-16-18 17:00											
	Analyzed:	Feb-17-18 01:30											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons		<15.0	15.0										
Diesel Range Organics		<15.0	15.0										

Kelsey Brooks
Project Manager

Analytical Report 576373

for

Larson & Associates

Project Manager: Sarah Johnson

Wallingford #3

17-0175-10

23-FEB-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

23-FEB-18

Project Manager: **Sarah Johnson**
Larson & Associates
P.O. Box 50685
Midland, TX 79710

Reference: XENCO Report No(s): **576373**
Wallingford #3
Project Address: Wallingford #3

Sarah Johnson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 576373. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 576373 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
DP-1 (0-1)	S	02-13-18 11:45		576373-001
DP-1 (1-2)	S	02-13-18 11:49		576373-002
DP-1 (2-3)	S	02-13-18 11:51		576373-003
DP-1 (3-4)	S	02-13-18 11:54		576373-004
DP-1 (4-6)	S	02-13-18 11:56		576373-005
DP-1 (6-8)	S	02-13-18 11:58		576373-006
DP-2 (0-1)	S	02-13-18 12:02		576373-007
DP-2 (1-2)	S	02-13-18 12:04		576373-008
DP-2 (2-3)	S	02-13-18 12:06		576373-009
DP-2 (3-4)	S	02-13-18 12:08		576373-010
DP-2 (4-6)	S	02-13-18 12:10		576373-011
DP-2 (6-8)	S	02-13-18 12:12		576373-012
DP-4 (0-1)	S	02-13-18 13:44		576373-013
DP-4 (1-2)	S	02-13-18 13:46		576373-014
DP-4 (2-3)	S	02-13-18 13:48		576373-015
DP-4 (3-4)	S	02-13-18 13:50		576373-016
DP-4 (4-6)	S	02-13-18 13:52		576373-017
DP-4 (6-8)	S	02-13-18 13:54		576373-018
DP-5 (0-1)	S	02-13-18 14:00		576373-019
DP-5 (1-2)	S	02-13-18 14:02		576373-020
DP-5 (2-3)	S	02-13-18 14:04		576373-021
DP-5 (3-4)	S	02-13-18 14:06		576373-022
DP-5 (4-6)	S	02-13-18 14:08		576373-023
DP-5 (6-8)	S	02-13-18 14:10		576373-024
DP-6 (0-1)	S	02-13-18 14:14		576373-025
DP-6 (1-2)	S	02-13-18 14:16		576373-026
DP-6 (2-3)	S	02-13-18 14:18		576373-027
DP-6 (3-4)	S	02-13-18 14:20		576373-028
DP-6 (4-6)	S	02-13-18 14:22		576373-029
DP-6 (6-8)	S	02-13-18 14:24		576373-030
DP-3 (0-1)	S	02-13-18 15:18		576373-031
DP-3 (1-2)	S	02-13-18 15:20		576373-032
DP-3 (2-3)	S	02-13-18 15:22		576373-033
DP-3 (3-4)	S	02-13-18 15:24		576373-034
DP-3 (4-6)	S	02-13-18 15:26		576373-035
DP-3 (6-8)	S	02-13-18 15:28		576373-036
DP-7 (0-1)	S	02-13-18 15:32		576373-037
DP-7 (1-2)	S	02-13-18 15:34		576373-038
DP-7 (2-3)	S	02-13-18 15:36		576373-039
DP-7 (3-4)	S	02-13-18 15:38		576373-040
DP-7 (4-6)	S	02-13-18 15:40		576373-041
DP-7 (6-8)	S	02-13-18 15:42		576373-042

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3041449 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-1 (0-1)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-001	Date Collected:	02.13.18 11.45		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.22.18 15.26	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.15.18 08.00	Basis:	Wet Weight
Seq Number:	3041217				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	02.15.18 19.27	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	02.15.18 19.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.15.18 19.27	
o-Terphenyl	84-15-1	95	%	70-135	02.15.18 19.27	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.17.18 07.45	Basis:	Wet Weight
Seq Number:	3041449				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.17.18 15.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.17.18 15.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.17.18 15.03	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.17.18 15.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.17.18 15.03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.17.18 15.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.17.18 15.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	80-120	02.17.18 15.03	
1,4-Difluorobenzene	540-36-3	81	%	80-120	02.17.18 15.03	

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-1 (1-2)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-002	Date Collected:	02.13.18 11.49		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.92	4.92	mg/kg	02.22.18 15.40	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-1 (2-3)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-003	Date Collected:	02.13.18 11.51		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.22.18 15.48	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-1 (3-4)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-004	Date Collected:	02.13.18 11.54		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	02.22.18 15.55	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-1 (4-6)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-005	Date Collected:	02.13.18 11.56		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.22.18 16.02	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-1 (6-8)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-006	Date Collected:	02.13.18 11.58		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.91	4.91	mg/kg	02.22.18 16.10	U	1

Larson & Associates, Midland, TX

Wallingford #3

Sample Id: **DP-2 (0-1)** Matrix: Soil Date Received:02.14.18 09.13

Lab Sample Id: 576373-007 Date Collected: 02.13.18 12.02

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: LRI % Moisture:

Analyst: AMB Date Prep: 02.21.18 16.00 Basis: Wet Weight

Seq Number: 3041929

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	02.22.18 16.32	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 02.15.18 08.00 Basis: Wet Weight

Seq Number: 3041217

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	02.15.18 19.52	U	1
Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	02.15.18 19.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	02.15.18 19.52	
o-Terphenyl	84-15-1	99	%	70-135	02.15.18 19.52	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: ALJ % Moisture:

Analyst: ALJ Date Prep: 02.17.18 07.45 Basis: Wet Weight

Seq Number: 3041449

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.17.18 15.22	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.17.18 15.22	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.17.18 15.22	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.17.18 15.22	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.17.18 15.22	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.17.18 15.22	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.17.18 15.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	80-120	02.17.18 15.22	
1,4-Difluorobenzene	540-36-3	81	%	80-120	02.17.18 15.22	

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-2 (1-2)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-008	Date Collected:	02.13.18 12.04		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.93	4.93	mg/kg	02.22.18 16.39	U	1

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Wallingford #3

Sample Id:	**DP-2 (2-3)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-009	Date Collected:	02.13.18 12.06		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.91	4.91	mg/kg	02.22.18 16.46	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-2 (3-4)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-010	Date Collected:	02.13.18 12.08		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.93	4.93	mg/kg	02.22.18 16.54	U	1

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Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-2 (4-6)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-011	Date Collected:	02.13.18 12.10		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	02.22.18 17.01	U	1

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Wallingford #3

Sample Id:	**DP-2 (6-8)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-012	Date Collected:	02.13.18 12.12		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.92	4.92	mg/kg	02.22.18 17.16	U	1

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Wallingford #3

Sample Id: **DP-4 (0-1)** Matrix: Soil Date Received:02.14.18 09.13

Lab Sample Id: 576373-013 Date Collected: 02.13.18 13.44

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: LRI % Moisture:

Analyst: AMB Date Prep: 02.21.18 16.00 Basis: Wet Weight

Seq Number: 3041929

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.22.18 17.23	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 02.15.18 08.00 Basis: Wet Weight

Seq Number: 3041217

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	02.15.18 20.18	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	02.15.18 20.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.15.18 20.18	
o-Terphenyl	84-15-1	96	%	70-135	02.15.18 20.18	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: ALJ % Moisture:

Analyst: ALJ Date Prep: 02.17.18 07.45 Basis: Wet Weight

Seq Number: 3041449

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.17.18 15.41	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.17.18 15.41	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.17.18 15.41	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.17.18 15.41	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.17.18 15.41	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.17.18 15.41	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.17.18 15.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	80-120	02.17.18 15.41	
4-Bromofluorobenzene	460-00-4	104	%	80-120	02.17.18 15.41	

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Wallingford #3

Sample Id:	**DP-4 (1-2)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-014	Date Collected:	02.13.18 13.46		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.91	4.91	mg/kg	02.22.18 17.30	U	1

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Wallingford #3

Sample Id:	**DP-4 (2-3)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-015	Date Collected:	02.13.18 13.48		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.22.18 17.38	U	1

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Wallingford #3

Sample Id:	**DP-4 (3-4)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-016	Date Collected:	02.13.18 13.50		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.22.18 18.00	U	1

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Wallingford #3

Sample Id:	**DP-4 (4-6)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-017	Date Collected:	02.13.18 13.52		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.89	4.89	mg/kg	02.22.18 18.07	U	1

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Wallingford #3

Sample Id:	**DP-4 (6-8)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-018	Date Collected:	02.13.18 13.54		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	02.22.18 18.14	U	1

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Wallingford #3

Sample Id: **DP-5 (0-1)** Matrix: Soil Date Received:02.14.18 09.13

Lab Sample Id: 576373-019 Date Collected: 02.13.18 14.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: LRI % Moisture:

Analyst: AMB Date Prep: 02.21.18 16.00 Basis: Wet Weight

Seq Number: 3041929

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.22.18 18.22	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 02.16.18 17.00 Basis: Wet Weight

Seq Number: 3041460

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	02.16.18 23.44	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	02.16.18 23.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	02.16.18 23.44	
o-Terphenyl	84-15-1	128	%	70-135	02.16.18 23.44	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: ALJ % Moisture:

Analyst: ALJ Date Prep: 02.17.18 07.45 Basis: Wet Weight

Seq Number: 3041449

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.17.18 16.00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.17.18 16.00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.17.18 16.00	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.17.18 16.00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.17.18 16.00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.17.18 16.00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.17.18 16.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	82	%	80-120	02.17.18 16.00	
4-Bromofluorobenzene	460-00-4	95	%	80-120	02.17.18 16.00	

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Wallingford #3

Sample Id:	**DP-5 (1-2)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-020	Date Collected:	02.13.18 14.02		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 16.00	Basis:	Wet Weight
Seq Number:	3041929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	02.22.18 18.29	U	1

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Wallingford #3

Sample Id:	**DP-5 (2-3)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-021	Date Collected:	02.13.18 14.04		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.87	4.87	mg/kg	02.22.18 19.13	U	1

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Wallingford #3

Sample Id:	**DP-5 (3-4)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-022	Date Collected:	02.13.18 14.06		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.92	4.92	mg/kg	02.22.18 19.28	U	1

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Wallingford #3

Sample Id:	**DP-5 (4-6)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-023	Date Collected:	02.13.18 14.08		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	02.22.18 19.35	U	1

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Wallingford #3

Sample Id:	**DP-5 (6-8)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-024	Date Collected:	02.13.18 14.10		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.22.18 19.43	U	1

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Wallingford #3

Sample Id: **DP-6 (0-1)** Matrix: Soil Date Received:02.14.18 09.13

Lab Sample Id: 576373-025 Date Collected: 02.13.18 14.14

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: LRI % Moisture:

Analyst: AMB Date Prep: 02.22.18 16.00 Basis: Wet Weight

Seq Number: 3041930

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.92	4.92	mg/kg	02.22.18 19.50	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 02.16.18 17.00 Basis: Wet Weight

Seq Number: 3041460

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	02.17.18 00.07	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	02.17.18 00.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	02.17.18 00.07	
o-Terphenyl	84-15-1	117	%	70-135	02.17.18 00.07	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: ALJ % Moisture:

Analyst: ALJ Date Prep: 02.17.18 07.45 Basis: Wet Weight

Seq Number: 3041449

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.17.18 16.19	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.17.18 16.19	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.17.18 16.19	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.17.18 16.19	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.17.18 16.19	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.17.18 16.19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.17.18 16.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	80-120	02.17.18 16.19	
4-Bromofluorobenzene	460-00-4	100	%	80-120	02.17.18 16.19	

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Wallingford #3

Sample Id:	**DP-6 (1-2)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-026	Date Collected:	02.13.18 14.16		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.22.18 19.57	U	1

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Wallingford #3

Sample Id:	**DP-6 (2-3)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-027	Date Collected:	02.13.18 14.18		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.89	4.89	mg/kg	02.22.18 20.19	U	1

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Wallingford #3

Sample Id:	**DP-6 (3-4)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-028	Date Collected:	02.13.18 14.20		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.22.18 20.27	U	1

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Wallingford #3

Sample Id:	**DP-6 (4-6)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-029	Date Collected:	02.13.18 14.22		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	02.22.18 20.34	U	1

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Wallingford #3

Sample Id:	**DP-6 (6-8)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-030	Date Collected:	02.13.18 14.24		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.93	4.93	mg/kg	02.22.18 20.41	U	1

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Wallingford #3

Sample Id: **DP-3 (0-1)** Matrix: Soil Date Received:02.14.18 09.13

Lab Sample Id: 576373-031 Date Collected: 02.13.18 15.18

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: LRI % Moisture:

Analyst: AMB Date Prep: 02.22.18 16.00 Basis: Wet Weight

Seq Number: 3041930

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	02.22.18 20.49	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 02.16.18 17.00 Basis: Wet Weight

Seq Number: 3041460

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	02.17.18 01.08	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	02.17.18 01.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	02.17.18 01.08	
o-Terphenyl	84-15-1	114	%	70-135	02.17.18 01.08	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: ALJ % Moisture:

Analyst: ALJ Date Prep: 02.17.18 07.45 Basis: Wet Weight

Seq Number: 3041449

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.17.18 16.38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.17.18 16.38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.17.18 16.38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.17.18 16.38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.17.18 16.38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.17.18 16.38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.17.18 16.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	80-120	02.17.18 16.38	
4-Bromofluorobenzene	460-00-4	98	%	80-120	02.17.18 16.38	

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Wallingford #3

Sample Id:	**DP-3 (1-2)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-032	Date Collected:	02.13.18 15.20		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.22.18 21.03	U	1

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Wallingford #3

Sample Id:	**DP-3 (2-3)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-033	Date Collected:	02.13.18 15.22		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	02.22.18 21.11	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-3 (3-4)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-034	Date Collected:	02.13.18 15.24		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.92	4.92	mg/kg	02.22.18 21.18	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-3 (4-6)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-035	Date Collected:	02.13.18 15.26		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	02.22.18 21.25	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-3 (6-8)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-036	Date Collected:	02.13.18 15.28		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.89	4.89	mg/kg	02.22.18 21.47	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-7 (0-1)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-037	Date Collected:	02.13.18 15.32		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	02.22.18 21.55	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.16.18 17.00	Basis:	Wet Weight
Seq Number:	3041460				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	02.17.18 01.30	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	02.17.18 01.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	02.17.18 01.30	
o-Terphenyl	84-15-1	116	%	70-135	02.17.18 01.30	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.17.18 07.45	Basis:	Wet Weight
Seq Number:	3041449				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.17.18 16.57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.17.18 16.57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.17.18 16.57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.17.18 16.57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.17.18 16.57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.17.18 16.57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.17.18 16.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	87	%	80-120	02.17.18 16.57	
4-Bromofluorobenzene	460-00-4	103	%	80-120	02.17.18 16.57	

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-7 (1-2)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-038	Date Collected:	02.13.18 15.34		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	02.22.18 22.02	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-7 (2-3)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-039	Date Collected:	02.13.18 15.36		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.22.18 22.09	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-7 (3-4)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-040	Date Collected:	02.13.18 15.38		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 16.00	Basis:	Wet Weight
Seq Number:	3041930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.01	5.01	mg/kg	02.22.18 22.17	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-7 (4-6)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-041	Date Collected:	02.13.18 15.40		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 17.00	Basis:	Wet Weight
Seq Number:	3041924				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.22.18 23.01	U	1

Certificate of Analytical Results 576373

Larson & Associates, Midland, TX

Wallingford #3

Sample Id:	**DP-7 (6-8)**	Matrix:	Soil	Date Received:	02.14.18 09.13
Lab Sample Id:	576373-042	Date Collected:	02.13.18 15.42		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.22.18 17.00	Basis:	Wet Weight
Seq Number:	3041924				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	02.22.18 23.16	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 576373

Larson & Associates

Wallingford #3

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3041929 Matrix: Solid Date Prep: 02.21.18
MB Sample Id: 7639632-1-BLK LCS Sample Id: 7639632-1-BKS LCSD Sample Id: 7639632-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	249	100	250	100	90-110	0	20	mg/kg	02.22.18 15:11	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3041930 Matrix: Solid Date Prep: 02.22.18
MB Sample Id: 7639633-1-BLK LCS Sample Id: 7639633-1-BKS LCSD Sample Id: 7639633-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	257	103	257	103	90-110	0	20	mg/kg	02.22.18 18:59	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3041924 Matrix: Solid Date Prep: 02.22.18
MB Sample Id: 7639634-1-BLK LCS Sample Id: 7639634-1-BKS LCSD Sample Id: 7639634-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	249	100	250	100	90-110	0	20	mg/kg	02.22.18 15:11	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3041929 Matrix: Soil Date Prep: 02.21.18
Parent Sample Id: 576373-001 MS Sample Id: 576373-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<4.90	245	257	105	90-110	mg/kg	02.22.18 15:33	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3041929 Matrix: Soil Date Prep: 02.21.18
Parent Sample Id: 576373-011 MS Sample Id: 576373-011 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<4.96	248	251	101	90-110	mg/kg	02.22.18 17:08	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 576373

Larson & Associates

Wallingford #3

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3041930 Matrix: Soil Date Prep: 02.22.18
Parent Sample Id: 576373-021 MS Sample Id: 576373-021 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<4.87	244	247	101	90-110	mg/kg	02.22.18 19:21	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3041930 Matrix: Soil Date Prep: 02.22.18
Parent Sample Id: 576373-031 MS Sample Id: 576373-031 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<4.98	249	249	100	90-110	mg/kg	02.22.18 20:56	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3041924 Matrix: Soil Date Prep: 02.22.18
Parent Sample Id: 575955-006 MS Sample Id: 575955-006 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	87.3	1220	1380	106	90-110	mg/kg	02.23.18 00:44	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3041924 Matrix: Soil Date Prep: 02.22.18
Parent Sample Id: 576373-041 MS Sample Id: 576373-041 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<5.00	250	251	100	90-110	mg/kg	02.22.18 23:08	

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3041217 Matrix: Solid Date Prep: 02.15.18
MB Sample Id: 7639225-1-BLK LCS Sample Id: 7639225-1-BKS LCSD Sample Id: 7639225-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	999	100	1080	108	70-135	8	35	mg/kg	02.15.18 09:49	
Diesel Range Organics	<15.0	1000	1090	109	1200	120	70-135	10	35	mg/kg	02.15.18 09:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		122		124		70-135	%	02.15.18 09:49
o-Terphenyl	94		121		130		70-135	%	02.15.18 09:49

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 576373

Larson & Associates

Wallingford #3

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3041460 Matrix: Solid Date Prep: 02.16.18
MB Sample Id: 7639377-1-BLK LCS Sample Id: 7639377-1-BKS LCSD Sample Id: 7639377-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1280	128	1090	109	70-135	16	35	mg/kg	02.16.18 23:05	
Diesel Range Organics	<15.0	1000	1290	129	1160	116	70-135	11	35	mg/kg	02.16.18 23:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		130		127		70-135	%	02.16.18 23:05
o-Terphenyl	128		125		124		70-135	%	02.16.18 23:05

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3041217 Matrix: Soil Date Prep: 02.15.18
Parent Sample Id: 576101-025 MS Sample Id: 576101-025 S MSD Sample Id: 576101-025 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	998	921	92	1010	101	70-135	9	35	mg/kg	02.15.18 11:08	
Diesel Range Organics	<15.0	998	1040	104	1120	112	70-135	7	35	mg/kg	02.15.18 11:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		117		70-135	%	02.15.18 11:08
o-Terphenyl	105		112		70-135	%	02.15.18 11:08

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3041460 Matrix: Soil Date Prep: 02.16.18
Parent Sample Id: 576373-025 MS Sample Id: 576373-025 S MSD Sample Id: 576373-025 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<15.0	999	1120	112	1100	110	70-135	2	35	mg/kg	02.17.18 00:27	
Diesel Range Organics	<15.0	999	1210	121	1170	117	70-135	3	35	mg/kg	02.17.18 00:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		126		70-135	%	02.17.18 00:27
o-Terphenyl	114		110		70-135	%	02.17.18 00:27

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 576373

Larson & Associates

Wallingford #3

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3041449 Matrix: Solid Date Prep: 02.17.18

MB Sample Id: 7639375-1-BLK LCS Sample Id: 7639375-1-BKS LCSD Sample Id: 7639375-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0819	81	0.0765	77	70-130	7	35	mg/kg	02.17.18 08:39	
Toluene	<0.00201	0.101	0.0854	85	0.0805	81	70-130	6	35	mg/kg	02.17.18 08:39	
Ethylbenzene	<0.00201	0.101	0.0962	95	0.0893	89	71-129	7	35	mg/kg	02.17.18 08:39	
m,p-Xylenes	<0.00402	0.201	0.190	95	0.177	89	70-135	7	35	mg/kg	02.17.18 08:39	
o-Xylene	<0.00201	0.101	0.0961	95	0.0902	90	71-133	6	35	mg/kg	02.17.18 08:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	81		84		88		80-120	%	02.17.18 08:39
4-Bromofluorobenzene	91		110		116		80-120	%	02.17.18 08:39

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3041449 Matrix: Soil Date Prep: 02.17.18

Parent Sample Id: 576187-001 MS Sample Id: 576187-001 S MSD Sample Id: 576187-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0765	76	0.0727	73	70-130	5	35	mg/kg	02.17.18 09:17	
Toluene	<0.00201	0.101	0.0794	79	0.0761	76	70-130	4	35	mg/kg	02.17.18 09:17	
Ethylbenzene	<0.00201	0.101	0.0833	82	0.0800	80	71-129	4	35	mg/kg	02.17.18 09:17	
m,p-Xylenes	<0.00402	0.201	0.164	82	0.158	79	70-135	4	35	mg/kg	02.17.18 09:17	
o-Xylene	<0.00201	0.101	0.0801	79	0.0803	80	71-133	0	35	mg/kg	02.17.18 09:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	83		82		80-120	%	02.17.18 09:17
4-Bromofluorobenzene	110		117		80-120	%	02.17.18 09:17

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Sarah Johnson SJohnson@laenvironmental.com

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants

507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: 576373

DATE: 2/14/18 PAGE 1 OF 3

PO #: LAB WORK ORDER #:

PROJECT LOCATION OR NAME: Wallingford #3

LAI PROJECT #: 17-0175-34 COLLECTOR:

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ ☒ GRO | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TCLP - METALS (RCRA) ☐ TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ OTHER LIST ☐ | LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐ | ☒ M300

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	BTEX	TRPH	GASOLINE	DIESEL	VOC	SVOC	8081	8082	TCLP-M	TCLP-P	TOTAL	LEAD	RCI	TDS	pH	EXPLOSIVES	CHLORIDE	M300	FIELD NOTES
DP-1 (0-1)		2/13/18	11:45	S	1				X		X		X	X													X		
(1-2)			11:49																										
(2-3)			11:51																										
(3-4)			11:54																										
(4-6)			11:56																										
(6-8)			11:58																										
DP-2 (0-1)			12:02								X		X	X															
(1-2)			12:04																										
(2-3)			12:06																										
(3-4)			12:08																										
(4-6)			12:10																										
(6-8)			12:12																										
DP-4 (0-1)			13:44								X		X	X															
(1-2)			13:46																										
(2-3)			13:48																										
TOTAL																													

RELINQUISHED BY:(Signature) DATE/TIME 2/14/18 RECEIVED BY: (Signature) 2/14/18 9:13

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RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

Temp: -10 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: -10.2

NOT USED

☐ HAND DELIVERED

71

Final 1.000

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CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants

507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: 576373

DATE: 2/14/18 PAGE 2 OF 3
PO #: LAB WORK ORDER #:
PROJECT LOCATION OR NAME: Walling Ford #3
LAI PROJECT #: 17-0175-034 COLLECTOR: Ashton

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ ☒ QR6 | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TCLP - METALS (RCRA) ☐ TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ OTHER LIST ☐ | LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐ | M300

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	BTEX ☒ MTBE ☐	TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☒	DIESEL - MOD 8015 ☒ ☒ QR6	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TCLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐	M300	FIELD NOTES
DP-4 (3-4)		2/13/18	13:50	S	1				X																	X			
(4-6)			13:52																										
(6-8)			13:54																										
DP-5 (0-1)			14:00								X		X	X															
(1-2)			14:02																										
(2-3)			14:04																										
(3-4)			14:06																										
(4-6)			14:08																										
(6-8)			14:10																										
DP-6 (0-1)			14:14								X		X	X															
(1-2)			14:16																										
(2-3)			14:18																										
(3-4)			14:20																										
(4-6)			14:22																										
(6-8)			14:24																										
TOTAL																													

RELINQUISHED BY:(Signature) DATE/TIME 2/14/18 RECEIVED BY: (Signature) 2/14/18 9:13

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RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

LAB
REC
CUS
☐ C
☐ HAND DELIVERED

Temp: -10 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: -10.2

ISED

Final 1.000

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CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: 576373

DATE: 2/14/18 PAGE 3 OF 3
PO #: LAB WORK ORDER #:
PROJECT LOCATION OR NAME: Wolfbone #3
LAI PROJECT #: 17-0175-34 COLLECTOR: Aslan

TRRP report? ☐ Yes ☒ No
TIME ZONE: Time zone/State: MST

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES: BTEX ☒ MTBE ☐	TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☒	DIESEL - MOD 8015 ☒ ☒ORO	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TCLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐ M300	FIELD NOTES
DP-3 (0-1)		2/13/18	15:18	S	1				X		X	X	X														X	
(1-2)			15:20																									
(2-3)			15:22																									
(3-4)			15:24																									
(4-6)			15:26																									
(6-8)			15:28																									
DP-7 (0-1)			15:32								X	X	X															
(1-2)			15:34																									
(2-3)			15:36																									
(3-4)			15:38																									
(4-6)			15:40																									
(6-8)			15:42																									
TOTAL																												

73

RELINQUISHED BY:(Signature) DATE/TIME 2/14/18 RECEIVED BY: (Signature) 2/14/18 9:13
RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

Temp: -10 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: -10.2

☐ HAND DELIVERED

NOT USED

Final 1.000

Appendix C
Photographs

Site Location

Site Prior to Remediation Viewing East, September 11, 2017

Site Prior to Remediation Viewing North, September 11, 2017

Site prior to Remediation Viewing West, September 11, 2017