APPROVED
By Olivia Yu at 11:55 am, Dec 01, 2017

NMOCD approves 1RP-4717 for closure.

Lea State 407 #1

Sampling and remediation

Sampling Procedure

- Larson & Associates collected samples on site. A backhoe was used to collect the vertically delineated samples, at a depth of 5’.
- A total of 20 samples were collected. There were 2 central release points used. Horizontal delineations from the central points did not exceed 25’. Vertical delineations did not exceed 5’.
- Two of the sampling locations required further excavation down to 12’. Permissible TPH and Chloride levels were achieved at this depth.
- Analytical sample reports are provided in Tables 1 & 2.

Table 1
Delineation Soil Sample Analytical Data Summary
Forty Acres Energy, Lea State 407 #1
UL M (SW/4, SW/4), Section 2, Township 21 South, Range 35 East
Lea County, New Mexico
N32° 30' 16.0596" W103° 20' 32.5572"

Excavation	Location	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
RRAL:					**10**	**50**				**5,000**	***250**
West	West Side	0 - 0.5	6/12/2017	In-Situ	<0.00373	<0.00373	<15.0	52.7	18.4	71.1	8.59
		5	6/12/2017	In-Situ	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	24.4
	East Side	0 - 0.5	6/12/2017	In-Situ	<0.00364	<0.00364	<15.0	61.6	<15.0	61.6	10.8
		5	6/12/2017	In-Situ	<0.00375	1.80	1,670	5,490	530	**7,690**	18.4
	North Side	0 - 0.5	6/12/2017	In-Situ	<0.00369	<0.00369	<15.0	<15.0	<15.0	<15.0	658
		5	6/12/2017	In-Situ	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	771
	South Side	0 - 0.5	6/12/2017	In-Situ	<0.00353	<0.00353	<15.0	<15.0	<15.0	<15.0	6.28
		5	6/12/2017	In-Situ	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	22.2
	Center (Bottom)	5	6/12/2017	In-Situ	<0.00200	<0.00200	<15.0	195	26.3	221	60.0
East	West Side	0 - 0.5	6/12/2017	In-Situ	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	6.66
		2	6/12/2017	In-Situ	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	204
		5	6/12/2017	In-Situ	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	270
	East Side	0 - 0.5	6/12/2017	In-Situ	<0.00202	<0.00202	<15.0	342	50.7	393	17.6
		5	6/12/2017	In-Situ	<0.00200	<0.00200	<15.0	20.0	<15.0	20.0	6.10
	North Side	0 - 0.5	6/12/2017	In-Situ	<0.00198	<0.00198	<14.9	<14.9	<14.9	<14.9	7.06
		5	6/12/2017	In-Situ	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	143
	South Side	0 - 0.5	6/12/2017	In-Situ	<0.00362	0.0264	<15.0	34.2	<15.0	34.2	9.42
		5	6/12/2017	In-Situ	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	222
	Center (Bottom)	5	6/12/2017	In-Situ	<0.00200	<0.00200	<15.0	18.7	<15.0	18.7	61.8
Background		0. - 0.5	6/12/2017		<0.00386	0.0206	<15.0	<15.0	<15.0	<15.0	<4.95

Notes: Analysis performed by Xenco Laboratories, Lubbock, Texas by EPA SW-846 Methods 8021B (BTEX), 8015M (TPH) and 300 (chloride).
*: OCD delineation limit
Depth in feet below ground surface (bgs)
mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)

Remediation Procedure

- Further excavation and sampling is required for one of the sampling points. The sample was collected from a depth of 5’. The measured TPH levels exceeded the acceptable levels.
- The soil will be removed and an additional sample will be collected from a lower depth. This process will be repeated until the collected sample meets all guidelines.
- Once the sampling phase is completed. The excavated areas will be backfilled with fresh soil.

Table 2
Remediation Soil Sample Analytical Data Summary
Forty Acres Energy, Lea State 407 #1
UL M (SW/4, SW/4), Section 2, Township 21 South, Range 35 East
Lea County, New Mexico
N32° 30' 16.0596" W103° 20' 32.5572"

Excavation	Position	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
RRAL:					**10**	**50**				**5,000**	***600**
West (East)	West Side	5	7/10/2017	In-Situ	--	--	<15.0	<15.0	<15.0	<15.0	23.9
	North Side	5	7/10/2017	In-Situ	--	--	<15.0	54.4	<15.0	**54.4**	18.9
	South Side	5	7/10/2017	In-Situ	--	--	<15.0	50.4	<15.0	50.4	17.7
	East Side	5	7/10/2017	In-Situ	--	--	<15.0	<15.0	<15.0	<15.0	49.9
	Bottom	10	7/10/2017	In-Situ	--	--	<15.0	58.2	<15.0	58.2	189
	Bottom	12.0	7/10/2017	In-Situ	--	--	<15.0	<15.0	<15.0	<15.0	193
West	North	0 - 0.5	6/12/2017	In-Situ	<0.00369	<0.00369	<15.0	<15.0	<15.0	<15.0	658
		5	6/12/2017	In-Situ	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	771
		7	7/10/2017	In-Situ	--	--	<15.0	361	75.7	436.5	592
		10	7/10/2017	In-Situ	--	--	<15.0	<15.0	<15.0	<15.0	587
		12	7/10/2017	In-Situ	--	--	<15.0	<15.0	<15.0	<15.0	428

Notes: Analysis performed by Xenco Laboratories, Lubbock, Texas by EPA SW-846 Methods 8021B (BTEX), 8015M (TPH) and 300 (chloride).

*: OCD delineation limit

Depth in feet below ground surface (bgs)

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


West - North
West - West
West - Center
West - East
West - South/Sidewall
East - North
East - East/Sidewall
East Center
East - West
East - South
0’
25’

Exhibit A – Location of nearest water well

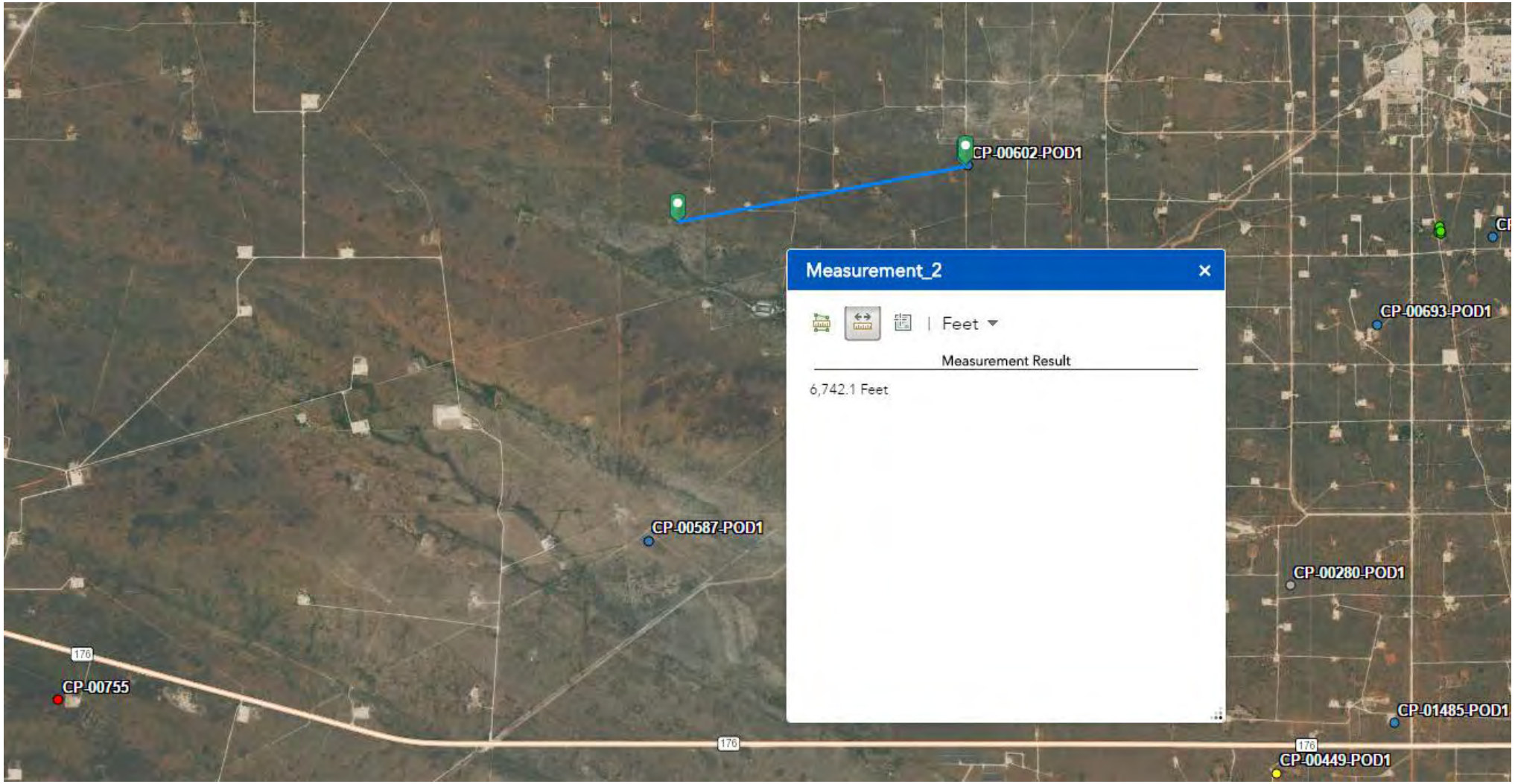
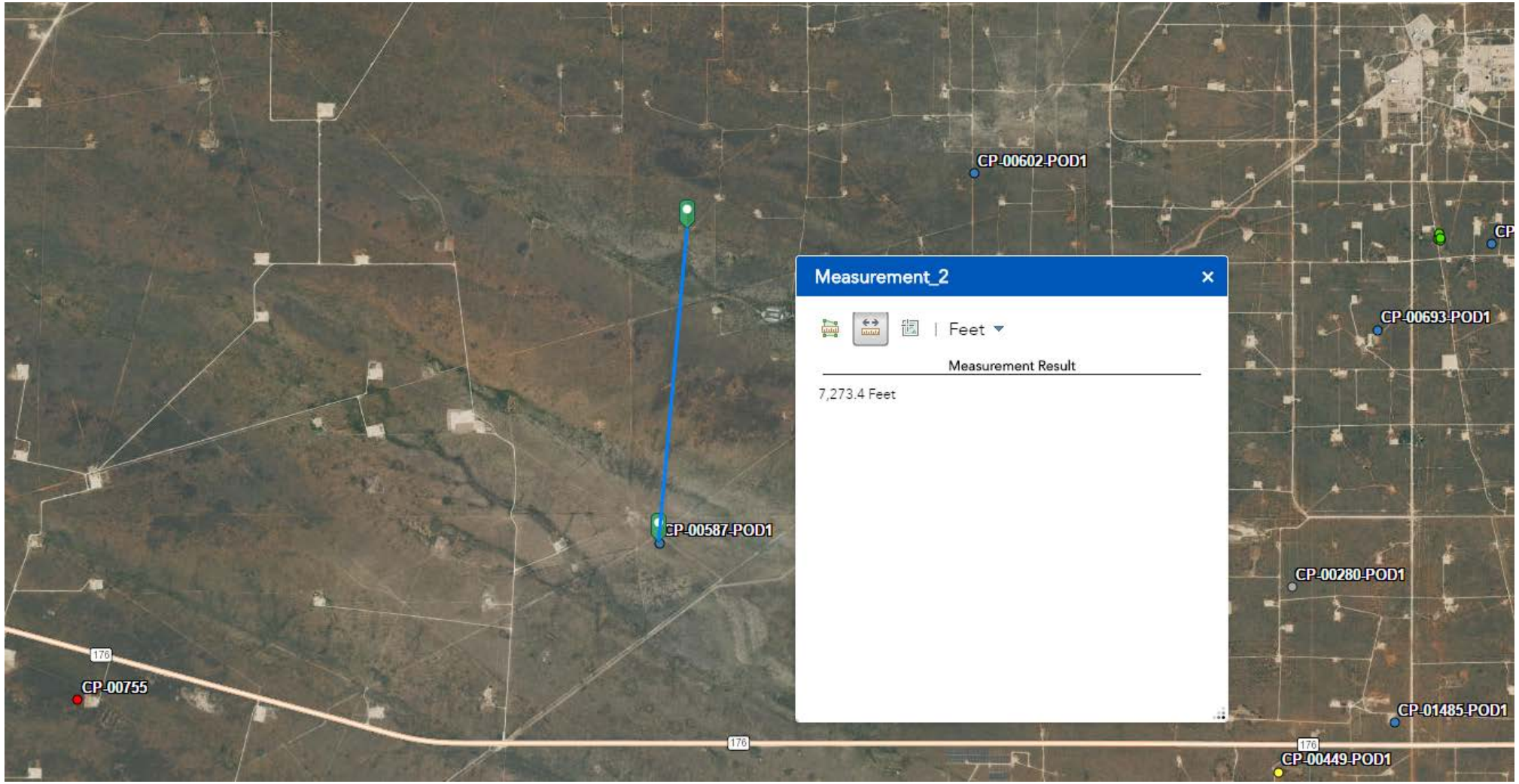


Exhibit B – location to 2nd nearest water well



Certificate of Analysis Summary 555245

Larson and Associates, Inc., Midland, TX

Project Name: Lea State 407 #1

Project Id: 17-0157-01
Contact: Mark Larson
Project Location: NM

Date Received in Lab: Tue Jun-13-17 11:14 am
Report Date: 21-JUN-17
Project Manager: Liz Givens

Analysis Requested													
	Lab Id:	555245-001		555245-002		555245-003		555245-004		555245-005		555245-006	
	Field Id:	W-W0-0.5		W-W5'		W-N 0-0.5'		W-N 5'		W-E 0-0.5		W-E 5'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-17 14:30		Jun-12-17 17:00		Jun-12-17 14:25		Jun-12-17 16:45		Jun-12-17 14:08		Jun-12-17 16:40	
BTEX by EPA 8021B	***Extracted:***	Jun-16-17 12:30		Jun-15-17 08:00		Jun-16-17 12:30		Jun-15-17 08:00		Jun-16-17 12:30		Jun-16-17 12:30	
	Analyzed:	Jun-16-17 19:14		Jun-15-17 10:25		Jun-16-17 19:30		Jun-15-17 14:30		Jun-16-17 19:46		Jun-16-17 15:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00373	0.00373	<0.00199	0.00199	<0.00369	0.00369	<0.00202	0.00202	<0.00364	0.00364	<0.00375	0.00375
Toluene		<0.00373	0.00373	<0.00199	0.00199	<0.00369	0.00369	<0.00202	0.00202	<0.00364	0.00364	0.0147	0.00375
Ethylbenzene		<0.00373	0.00373	<0.00199	0.00199	<0.00369	0.00369	<0.00202	0.00202	<0.00364	0.00364	0.330	0.00375
m,p-Xylenes		<0.00746	0.00746	<0.00398	0.00398	<0.00738	0.00738	<0.00403	0.00403	<0.00727	0.00727	1.04	0.00749
o-Xylene		<0.00373	0.00373	<0.00199	0.00199	<0.00369	0.00369	<0.00202	0.00202	<0.00364	0.00364	0.420	0.00375
Total Xylenes		<0.00373	0.00373	<0.00199	0.00199	<0.00369	0.00369	<0.00202	0.00202	<0.00364	0.00364	1.46	0.00375
Total BTEX		<0.00373	0.00373	<0.00199	0.00199	<0.00369	0.00369	<0.00202	0.00202	<0.00364	0.00364	1.80	0.00375
Chloride by EPA 300	***Extracted:***	Jun-16-17 17:15		Jun-16-17 17:15		Jun-16-17 17:15		Jun-16-17 17:15		Jun-16-17 17:15		Jun-16-17 17:15	
	Analyzed:	Jun-16-17 19:46		Jun-16-17 19:54		Jun-16-17 20:02		Jun-16-17 20:24		Jun-16-17 20:32		Jun-16-17 20:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		8.59	4.93	24.4	4.93	658	5.00	771	4.97	10.8	4.98	18.4	4.98
TPH By SW8015 Mod	***Extracted:***	Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00	
	Analyzed:	Jun-17-17 02:08		Jun-17-17 02:29		Jun-17-17 03:32		Jun-17-17 03:52		Jun-17-17 04:13		Jun-17-17 04:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	1670	74.7
Diesel Range Organics		52.7	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	61.6	15.0	5490	74.7
Oil Range Hydrocarbons		18.4	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	530	74.7
Total TPH		71.1	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	61.6	15.0	7690	74.7

Liz Givens
Project Manager

Certificate of Analysis Summary 555245

Larson and Associates, Inc., Midland, TX

Project Name: Lea State 407 #1

Project Id: 17-0157-01
Contact: Mark Larson
Project Location: NM

Date Received in Lab: Tue Jun-13-17 11:14 am
Report Date: 21-JUN-17
Project Manager: Liz Givens

Analysis Requested													
	Lab Id:	555245-007		555245-008		555245-010		555245-011		555245-012		555245-013	
	Field Id:	W-S 0-0.5		W-S 5'		W-C 5'		E-N 0-0.5'		E-N 5'		E-E 0-0.5'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-17 14:34		Jun-12-17 17:15		Jun-12-17 14:40		Jun-12-17 13:40		Jun-12-17 15:55		Jun-12-17 14:15	
BTEX by EPA 8021B	***Extracted:***	Jun-16-17 12:30		Jun-15-17 08:00		Jun-16-17 12:30		Jun-16-17 12:30		Jun-16-17 12:30		Jun-16-17 12:30	
	Analyzed:	Jun-16-17 20:03		Jun-15-17 15:36		Jun-16-17 17:02		Jun-16-17 18:58		Jun-16-17 17:19		Jun-16-17 17:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00353	0.00353	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Toluene		<0.00353	0.00353	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Ethylbenzene		<0.00353	0.00353	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
m,p-Xylenes		<0.00707	0.00707	<0.00396	0.00396	<0.00399	0.00399	<0.00397	0.00397	<0.00402	0.00402	<0.00405	0.00405
o-Xylene		<0.00353	0.00353	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Total Xylenes		<0.00353	0.00353	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Total BTEX		<0.00353	0.00353	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Chloride by EPA 300	***Extracted:***	Jun-16-17 17:15		Jun-16-17 17:15		Jun-16-17 17:15		Jun-16-17 17:15		Jun-16-17 17:15		Jun-16-17 17:15	
	Analyzed:	Jun-16-17 21:02		Jun-16-17 21:10		Jun-16-17 21:18		Jun-16-17 21:25		Jun-16-17 21:33		Jun-16-17 21:40	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		6.28	4.99	22.2	4.99	60.0	4.95	7.06	4.92	143	4.98	17.6	4.97
TPH By SW8015 Mod	***Extracted:***	Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00	
	Analyzed:	Jun-17-17 04:57		Jun-17-17 05:17		Jun-17-17 05:39		Jun-17-17 05:59		Jun-17-17 07:03		Jun-17-17 12:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9	<15.0	15.0
Diesel Range Organics		<15.0	15.0	<15.0	15.0	195	15.0	<14.9	14.9	<14.9	14.9	342	15.0
Oil Range Hydrocarbons		<15.0	15.0	<15.0	15.0	26.3	15.0	<14.9	14.9	<14.9	14.9	50.7	15.0
Total TPH		<15.0	15.0	<15.0	15.0	221	15.0	<14.9	14.9	<14.9	14.9	393	15.0

Liz Givens
Project Manager

Certificate of Analysis Summary 555245

Larson and Associates, Inc., Midland, TX

Project Name: Lea State 407 #1

Project Id: 17-0157-01
Contact: Mark Larson
Project Location: NM

Date Received in Lab: Tue Jun-13-17 11:14 am
Report Date: 21-JUN-17
Project Manager: Liz Givens

Analysis Requested													
	Lab Id:	555245-014		555245-015		555245-016		555245-017		555245-018		555245-019	
	Field Id:	E-E 5'		E-S 0-0.5'		E-S 5'		E-W 0-0.5'		E-W 2'		E-W 5'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-17 16:00		Jun-12-17 14:00		Jun-12-17 16:20		Jun-12-17 16:53		Jun-12-17 16:54		Jun-12-17 16:54	
BTEX by EPA 8021B	***Extracted:***	Jun-16-17 12:30		Jun-19-17 06:30		Jun-16-17 12:30		Jun-16-17 12:30		Jun-16-17 12:30		Jun-15-17 17:00	
	Analyzed:	Jun-16-17 15:39		Jun-19-17 11:46		Jun-16-17 16:12		Jun-16-17 16:45		Jun-16-17 17:52		Jun-15-17 18:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00362	0.00362	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Toluene		<0.00200	0.00200	0.0124	0.00362	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Ethylbenzene		<0.00200	0.00200	<0.00362	0.00362	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
m,p-Xylenes		<0.00401	0.00401	0.0140	0.00725	<0.00398	0.00398	<0.00399	0.00399	<0.00402	0.00402	<0.00402	0.00402
o-Xylene		<0.00200	0.00200	<0.00362	0.00362	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Total Xylenes		<0.00200	0.00200	0.0140	0.00362	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Total BTEX		<0.00200	0.00200	0.0264	0.00362	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	Jun-16-17 17:30		Jun-16-17 17:30		Jun-16-17 17:30		Jun-16-17 17:30		Jun-16-17 17:30		Jun-16-17 17:30	
	Analyzed:	Jun-16-17 22:26		Jun-16-17 22:49		Jun-16-17 22:56		Jun-16-17 23:04		Jun-16-17 23:12		Jun-16-17 23:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		6.10	4.96	9.42	4.97	222	4.95	6.66	4.96	204	4.98	270	4.93
TPH By SW8015 Mod	***Extracted:***	Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00		Jun-16-17 16:00	
	Analyzed:	Jun-17-17 07:46		Jun-17-17 08:07		Jun-17-17 08:28		Jun-17-17 08:49		Jun-17-17 09:10		Jun-17-17 09:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics		20.0	15.0	34.2	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		20.0	15.0	34.2	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Liz Givens
Project Manager

Certificate of Analysis Summary 555245

Larson and Associates, Inc., Midland, TX

Project Name: Lea State 407 #1

Project Id: 17-0157-01
Contact: Mark Larson
Project Location: NM

Date Received in Lab: Tue Jun-13-17 11:14 am
Report Date: 21-JUN-17
Project Manager: Liz Givens

Analysis Requested									
	Lab Id:	555245-020		555245-021					
	Field Id:	E-C 5'		BG 0-0.5					
	Depth:								
	Matrix:	SOIL		SOIL					
	Sampled:	Jun-12-17 16:54		Jun-12-17 14:43					
BTEX by EPA 8021B	***Extracted:***	Jun-16-17 12:30		Jun-19-17 06:30					
	Analyzed:	Jun-16-17 18:41		Jun-19-17 11:29					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00386	0.00386				
Toluene		<0.00200	0.00200	0.0115	0.00386				
Ethylbenzene		<0.00200	0.00200	<0.00386	0.00386				
m,p-Xylenes		<0.00401	0.00401	0.00913	0.00772				
o-Xylene		<0.00200	0.00200	<0.00386	0.00386				
Total Xylenes		<0.00200	0.00200	0.00913	0.00386				
Total BTEX		<0.00200	0.00200	0.0206	0.00386				
Chloride by EPA 300	***Extracted:***	Jun-16-17 17:30		Jun-16-17 17:30					
	Analyzed:	Jun-16-17 23:42		Jun-16-17 23:50					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		61.8	4.94	<4.95	4.95				
TPH By SW8015 Mod	***Extracted:***	Jun-16-17 16:00		Jun-16-17 16:00					
	Analyzed:	Jun-17-17 09:51		Jun-17-17 10:12					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0				
Diesel Range Organics		18.7	15.0	<15.0	15.0				
Oil Range Hydrocarbons		<15.0	15.0	<15.0	15.0				
Total TPH		18.7	15.0	<15.0	15.0				

Liz Givens
Project Manager

Analytical Report 555245

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Lea State 407 #1

17-0157-01

21-JUN-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

21-JUN-17

Project Manager: **Mark Larson**
Larson and Associates, Inc.
P. O. Box 50685
Midland, TX 79710

Reference: XENCO Report No(s): **555245**
Lea State 407 #1
Project Address: NM

Mark Larson :

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) 555245. 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. 555245 will be filed for 60 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,

Liz Givens
Project Manager

Sample Cross Reference 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
W-W0-0.5	S	06-12-17 14:30		555245-001
W-W5'	S	06-12-17 17:00		555245-002
W-N 0-0.5'	S	06-12-17 14:25		555245-003
W-N 5'	S	06-12-17 16:45		555245-004
W-E 0-0.5	S	06-12-17 14:08		555245-005
W-E 5'	S	06-12-17 16:40		555245-006
W-S 0-0.5	S	06-12-17 14:34		555245-007
W-S 5'	S	06-12-17 17:15		555245-008
W-C 5'	S	06-12-17 14:40		555245-010
E-N 0-0.5'	S	06-12-17 13:40		555245-011
E-N 5'	S	06-12-17 15:55		555245-012
E-E 0-0.5'	S	06-12-17 14:15		555245-013
E-E 5'	S	06-12-17 16:00		555245-014
E-S 0-0.5'	S	06-12-17 14:00		555245-015
E-S 5'	S	06-12-17 16:20		555245-016
E-W 0-0.5'	S	06-12-17 16:53		555245-017
E-W 2'	S	06-12-17 16:54		555245-018
E-W 5'	S	06-12-17 16:54		555245-019
E-C 5'	S	06-12-17 16:54		555245-020
BG 0-0.5	S	06-12-17 14:43		555245-021
W-C 0-0.5	S	06-12-17 15:40		Not Analyzed

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3019910 BTEX by EPA 8021B
Lab Sample ID 555245-002 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Toluene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 555245-002, -004, -008.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3019913 BTEX by EPA 8021B
Lab Sample ID 555245-019 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Toluene, m,p-Xylenes recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Ethylbenzene, o-Xylene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 555245-019.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3020004 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 555245-006 S,555245-006 SD,555245-006.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 555245-001, -003, -005, -006, -007, -010, -011, -012, -013, -014, -016, -017, -018, -020

Lab Sample ID 555245-006 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).
Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 555245-001, -003, -005, -006, -007, -010, -011, -012, -013, -014, -016, -017, -018, -020.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3020111 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-W0-0.5**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-001	Date Collected:	06.12.17 14.30		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.59**	4.93	mg/kg	06.16.17 19.46		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 02.08	U	1
Diesel Range Organics	C10C28DRO	**52.7**	15.0	mg/kg	06.17.17 02.08		1
Oil Range Hydrocarbons	PHCG2835	**18.4**	15.0	mg/kg	06.17.17 02.08		1
Total TPH	PHC635	**71.1**	15.0	mg/kg	06.17.17 02.08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	06.17.17 02.08	
o-Terphenyl	84-15-1	98	%	70-135	06.17.17 02.08	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-W0-0.5**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-001	Date Collected:	06.12.17 14.30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00373	0.00373	mg/kg	06.16.17 19.14	U	1
Toluene	108-88-3	<0.00373	0.00373	mg/kg	06.16.17 19.14	U	1
Ethylbenzene	100-41-4	<0.00373	0.00373	mg/kg	06.16.17 19.14	U	1
m,p-Xylenes	179601-23-1	<0.00746	0.00746	mg/kg	06.16.17 19.14	U	1
o-Xylene	95-47-6	<0.00373	0.00373	mg/kg	06.16.17 19.14	U	1
Total Xylenes	1330-20-7	<0.00373	0.00373	mg/kg	06.16.17 19.14	U	1
Total BTEX		<0.00373	0.00373	mg/kg	06.16.17 19.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	80-120	06.16.17 19.14	
4-Bromofluorobenzene	460-00-4	115	%	80-120	06.16.17 19.14	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-W5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-002	Date Collected:	06.12.17 17.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**24.4**	4.93	mg/kg	06.16.17 19.54		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 02.29	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 02.29	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 02.29	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 02.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	06.17.17 02.29	
o-Terphenyl	84-15-1	97	%	70-135	06.17.17 02.29	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-W5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-002	Date Collected:	06.12.17 17.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.15.17 08.00	Basis:	Wet Weight
Seq Number:	3019910				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.15.17 10.25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.15.17 10.25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.15.17 10.25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.15.17 10.25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.15.17 10.25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.15.17 10.25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.15.17 10.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92	%	80-120	06.15.17 10.25	
4-Bromofluorobenzene	460-00-4	104	%	80-120	06.15.17 10.25	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-N 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-003	Date Collected:	06.12.17 14.25		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**658**	5.00	mg/kg	06.16.17 20.02		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 03.32	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 03.32	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 03.32	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 03.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.17.17 03.32	
o-Terphenyl	84-15-1	101	%	70-135	06.17.17 03.32	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-N 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-003	Date Collected:	06.12.17 14.25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00369	0.00369	mg/kg	06.16.17 19.30	U	1
Toluene	108-88-3	<0.00369	0.00369	mg/kg	06.16.17 19.30	U	1
Ethylbenzene	100-41-4	<0.00369	0.00369	mg/kg	06.16.17 19.30	U	1
m,p-Xylenes	179601-23-1	<0.00738	0.00738	mg/kg	06.16.17 19.30	U	1
o-Xylene	95-47-6	<0.00369	0.00369	mg/kg	06.16.17 19.30	U	1
Total Xylenes	1330-20-7	<0.00369	0.00369	mg/kg	06.16.17 19.30	U	1
Total BTEX		<0.00369	0.00369	mg/kg	06.16.17 19.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	80-120	06.16.17 19.30	
4-Bromofluorobenzene	460-00-4	84	%	80-120	06.16.17 19.30	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-N 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-004	Date Collected:	06.12.17 16.45		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**771**	4.97	mg/kg	06.16.17 20.24		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 03.52	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 03.52	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 03.52	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 03.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	06.17.17 03.52	
o-Terphenyl	84-15-1	97	%	70-135	06.17.17 03.52	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-N 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-004	Date Collected:	06.12.17 16.45		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.15.17 08.00	Basis:	Wet Weight
Seq Number:	3019910				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.15.17 14.30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.15.17 14.30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.15.17 14.30	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.15.17 14.30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.15.17 14.30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.15.17 14.30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.15.17 14.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	80-120	06.15.17 14.30	
1,4-Difluorobenzene	540-36-3	97	%	80-120	06.15.17 14.30	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-E 0-0.5**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-005	Date Collected:	06.12.17 14.08		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.8**	4.98	mg/kg	06.16.17 20.32		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 04.13	U	1
Diesel Range Organics	C10C28DRO	**61.6**	15.0	mg/kg	06.17.17 04.13		1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 04.13	U	1
Total TPH	PHC635	**61.6**	15.0	mg/kg	06.17.17 04.13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	06.17.17 04.13	
o-Terphenyl	84-15-1	98	%	70-135	06.17.17 04.13	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-E 0-0.5**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-005	Date Collected:	06.12.17 14.08		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00364	0.00364	mg/kg	06.16.17 19.46	U	1
Toluene	108-88-3	<0.00364	0.00364	mg/kg	06.16.17 19.46	U	1
Ethylbenzene	100-41-4	<0.00364	0.00364	mg/kg	06.16.17 19.46	U	1
m,p-Xylenes	179601-23-1	<0.00727	0.00727	mg/kg	06.16.17 19.46	U	1
o-Xylene	95-47-6	<0.00364	0.00364	mg/kg	06.16.17 19.46	U	1
Total Xylenes	1330-20-7	<0.00364	0.00364	mg/kg	06.16.17 19.46	U	1
Total BTEX		<0.00364	0.00364	mg/kg	06.16.17 19.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	80-120	06.16.17 19.46	
1,4-Difluorobenzene	540-36-3	97	%	80-120	06.16.17 19.46	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-E 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-006	Date Collected:	06.12.17 16.40		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.4**	4.98	mg/kg	06.16.17 20.55		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	**1670**	74.7	mg/kg	06.17.17 04.34		5
Diesel Range Organics	C10C28DRO	**5490**	74.7	mg/kg	06.17.17 04.34		5
Oil Range Hydrocarbons	PHCG2835	**530**	74.7	mg/kg	06.17.17 04.34		5
Total TPH	PHC635	**7690**	74.7	mg/kg	06.17.17 04.34		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	06.17.17 04.34	
o-Terphenyl	84-15-1	87	%	70-135	06.17.17 04.34	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-E 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-006	Date Collected:	06.12.17 16.40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00375	0.00375	mg/kg	06.16.17 15.22	U	1
Toluene	108-88-3	**0.0147**	0.00375	mg/kg	06.16.17 15.22		1
Ethylbenzene	100-41-4	**0.330**	0.00375	mg/kg	06.16.17 15.22		1
m,p-Xylenes	179601-23-1	**1.04**	0.00749	mg/kg	06.16.17 15.22		1
o-Xylene	95-47-6	**0.420**	0.00375	mg/kg	06.16.17 15.22		1
Total Xylenes	1330-20-7	**1.46**	0.00375	mg/kg	06.16.17 15.22		1
Total BTEX		**1.80**	0.00375	mg/kg	06.16.17 15.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	407	%	80-120	06.16.17 15.22	**
1,4-Difluorobenzene	540-36-3	113	%	80-120	06.16.17 15.22	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-S 0-0.5**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-007	Date Collected:	06.12.17 14.34		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.28**	4.99	mg/kg	06.16.17 21.02		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 04.57	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 04.57	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 04.57	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 04.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	06.17.17 04.57	
o-Terphenyl	84-15-1	98	%	70-135	06.17.17 04.57	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-S 0-0.5**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-007	Date Collected:	06.12.17 14.34		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00353	0.00353	mg/kg	06.16.17 20.03	U	1
Toluene	108-88-3	<0.00353	0.00353	mg/kg	06.16.17 20.03	U	1
Ethylbenzene	100-41-4	<0.00353	0.00353	mg/kg	06.16.17 20.03	U	1
m,p-Xylenes	179601-23-1	<0.00707	0.00707	mg/kg	06.16.17 20.03	U	1
o-Xylene	95-47-6	<0.00353	0.00353	mg/kg	06.16.17 20.03	U	1
Total Xylenes	1330-20-7	<0.00353	0.00353	mg/kg	06.16.17 20.03	U	1
Total BTEX		<0.00353	0.00353	mg/kg	06.16.17 20.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	81	%	80-120	06.16.17 20.03	
1,4-Difluorobenzene	540-36-3	91	%	80-120	06.16.17 20.03	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-S 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-008	Date Collected:	06.12.17 17.15		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**22.2**	4.99	mg/kg	06.16.17 21.10		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 05.17	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 05.17	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 05.17	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 05.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	06.17.17 05.17	
o-Terphenyl	84-15-1	96	%	70-135	06.17.17 05.17	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-S 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-008	Date Collected:	06.12.17 17.15		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.15.17 08.00	Basis:	Wet Weight
Seq Number:	3019910				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.15.17 15.36	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.15.17 15.36	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.15.17 15.36	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.15.17 15.36	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.15.17 15.36	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.15.17 15.36	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.15.17 15.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	80-120	06.15.17 15.36	
1,4-Difluorobenzene	540-36-3	83	%	80-120	06.15.17 15.36	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-C 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-010	Date Collected:	06.12.17 14.40		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**60.0**	4.95	mg/kg	06.16.17 21.18		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 05.39	U	1
Diesel Range Organics	C10C28DRO	**195**	15.0	mg/kg	06.17.17 05.39		1
Oil Range Hydrocarbons	PHCG2835	**26.3**	15.0	mg/kg	06.17.17 05.39		1
Total TPH	PHC635	**221**	15.0	mg/kg	06.17.17 05.39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.17.17 05.39	
o-Terphenyl	84-15-1	106	%	70-135	06.17.17 05.39	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**W-C 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-010	Date Collected:	06.12.17 14.40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.16.17 17.02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.16.17 17.02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.16.17 17.02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.16.17 17.02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.16.17 17.02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.16.17 17.02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.16.17 17.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	80-120	06.16.17 17.02	
1,4-Difluorobenzene	540-36-3	92	%	80-120	06.16.17 17.02	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-N 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-011	Date Collected:	06.12.17 13.40		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.06**	4.92	mg/kg	06.16.17 21.25		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	06.17.17 05.59	U	1
Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	06.17.17 05.59	U	1
Oil Range Hydrocarbons	PHCG2835	<14.9	14.9	mg/kg	06.17.17 05.59	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	06.17.17 05.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.17.17 05.59	
o-Terphenyl	84-15-1	114	%	70-135	06.17.17 05.59	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-N 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-011	Date Collected:	06.12.17 13.40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.16.17 18.58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.16.17 18.58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.16.17 18.58	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.16.17 18.58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.16.17 18.58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.16.17 18.58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.16.17 18.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	80-120	06.16.17 18.58	
4-Bromofluorobenzene	460-00-4	97	%	80-120	06.16.17 18.58	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-N 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-012	Date Collected:	06.12.17 15.55		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**143**	4.98	mg/kg	06.16.17 21.33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	06.17.17 07.03	U	1
Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	06.17.17 07.03	U	1
Oil Range Hydrocarbons	PHCG2835	<14.9	14.9	mg/kg	06.17.17 07.03	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	06.17.17 07.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	06.17.17 07.03	
o-Terphenyl	84-15-1	95	%	70-135	06.17.17 07.03	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-N 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-012	Date Collected:	06.12.17 15.55		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.16.17 17.19	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.16.17 17.19	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.16.17 17.19	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.16.17 17.19	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.16.17 17.19	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.16.17 17.19	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.16.17 17.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	80-120	06.16.17 17.19	
1,4-Difluorobenzene	540-36-3	99	%	80-120	06.16.17 17.19	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-E 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-013	Date Collected:	06.12.17 14.15		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.15	Basis:	Wet Weight
Seq Number:	3019985				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**17.6**	4.97	mg/kg	06.16.17 21.40		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 12.49	U	1
Diesel Range Organics	C10C28DRO	**342**	15.0	mg/kg	06.17.17 12.49		1
Oil Range Hydrocarbons	PHCG2835	**50.7**	15.0	mg/kg	06.17.17 12.49		1
Total TPH	PHC635	**393**	15.0	mg/kg	06.17.17 12.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	06.17.17 12.49	
o-Terphenyl	84-15-1	98	%	70-135	06.17.17 12.49	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-E 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-013	Date Collected:	06.12.17 14.15		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.16.17 17.35	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.16.17 17.35	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.16.17 17.35	U	1
m,p-Xylenes	179601-23-1	<0.00405	0.00405	mg/kg	06.16.17 17.35	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.16.17 17.35	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.16.17 17.35	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.16.17 17.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	80-120	06.16.17 17.35	
4-Bromofluorobenzene	460-00-4	105	%	80-120	06.16.17 17.35	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-E 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-014	Date Collected:	06.12.17 16.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.30	Basis:	Wet Weight
Seq Number:	3019987				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.10**	4.96	mg/kg	06.16.17 22.26		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 07.46	U	1
Diesel Range Organics	C10C28DRO	**20.0**	15.0	mg/kg	06.17.17 07.46		1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 07.46	U	1
Total TPH	PHC635	**20.0**	15.0	mg/kg	06.17.17 07.46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.17.17 07.46	
o-Terphenyl	84-15-1	104	%	70-135	06.17.17 07.46	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-E 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-014	Date Collected:	06.12.17 16.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.16.17 15.39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.16.17 15.39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.16.17 15.39	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.16.17 15.39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.16.17 15.39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.16.17 15.39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.16.17 15.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	80-120	06.16.17 15.39	
1,4-Difluorobenzene	540-36-3	91	%	80-120	06.16.17 15.39	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-S 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-015	Date Collected:	06.12.17 14.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.30	Basis:	Wet Weight
Seq Number:	3019987				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.42**	4.97	mg/kg	06.16.17 22.49		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 08.07	U	1
Diesel Range Organics	C10C28DRO	**34.2**	15.0	mg/kg	06.17.17 08.07		1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 08.07	U	1
Total TPH	PHC635	**34.2**	15.0	mg/kg	06.17.17 08.07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.17.17 08.07	
o-Terphenyl	84-15-1	106	%	70-135	06.17.17 08.07	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-S 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-015	Date Collected:	06.12.17 14.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.19.17 06.30	Basis:	Wet Weight
Seq Number:	3020111				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00362	0.00362	mg/kg	06.19.17 11.46	U	1
Toluene	108-88-3	**0.0124**	0.00362	mg/kg	06.19.17 11.46		1
Ethylbenzene	100-41-4	<0.00362	0.00362	mg/kg	06.19.17 11.46	U	1
m,p-Xylenes	179601-23-1	**0.0140**	0.00725	mg/kg	06.19.17 11.46		1
o-Xylene	95-47-6	<0.00362	0.00362	mg/kg	06.19.17 11.46	U	1
Total Xylenes	1330-20-7	**0.0140**	0.00362	mg/kg	06.19.17 11.46		1
Total BTEX		**0.0264**	0.00362	mg/kg	06.19.17 11.46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	80-120	06.19.17 11.46	
4-Bromofluorobenzene	460-00-4	82	%	80-120	06.19.17 11.46	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-S 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-016	Date Collected:	06.12.17 16.20		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.30	Basis:	Wet Weight
Seq Number:	3019987				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**222**	4.95	mg/kg	06.16.17 22.56		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 08.28	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 08.28	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 08.28	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 08.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.17.17 08.28	
o-Terphenyl	84-15-1	103	%	70-135	06.17.17 08.28	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-S 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-016	Date Collected:	06.12.17 16.20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.16.17 16.12	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.16.17 16.12	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.16.17 16.12	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.16.17 16.12	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.16.17 16.12	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.16.17 16.12	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.16.17 16.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	80-120	06.16.17 16.12	
1,4-Difluorobenzene	540-36-3	85	%	80-120	06.16.17 16.12	

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-W 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-017	Date Collected:	06.12.17 16.53		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.30	Basis:	Wet Weight
Seq Number:	3019987				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.66**	4.96	mg/kg	06.16.17 23.04		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 08.49	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 08.49	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 08.49	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 08.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.17.17 08.49	
o-Terphenyl	84-15-1	106	%	70-135	06.17.17 08.49	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-W 0-0.5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-017	Date Collected:	06.12.17 16.53		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.16.17 16.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.16.17 16.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.16.17 16.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.16.17 16.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.16.17 16.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.16.17 16.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.16.17 16.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	80-120	06.16.17 16.45	
4-Bromofluorobenzene	460-00-4	115	%	80-120	06.16.17 16.45	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-W 2'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-018	Date Collected:	06.12.17 16.54		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.30	Basis:	Wet Weight
Seq Number:	3019987				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**204**	4.98	mg/kg	06.16.17 23.12		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 09.10	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 09.10	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 09.10	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 09.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.17.17 09.10	
o-Terphenyl	84-15-1	104	%	70-135	06.17.17 09.10	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-W 2'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-018	Date Collected:	06.12.17 16.54		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.16.17 17.52	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.16.17 17.52	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.16.17 17.52	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.16.17 17.52	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.16.17 17.52	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.16.17 17.52	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.16.17 17.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	80-120	06.16.17 17.52	
4-Bromofluorobenzene	460-00-4	95	%	80-120	06.16.17 17.52	

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Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-W 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-019	Date Collected:	06.12.17 16.54		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.30	Basis:	Wet Weight
Seq Number:	3019987				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**270**	4.93	mg/kg	06.16.17 23.34		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 09.31	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 09.31	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 09.31	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 09.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	06.17.17 09.31	
o-Terphenyl	84-15-1	96	%	70-135	06.17.17 09.31	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-W 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-019	Date Collected:	06.12.17 16.54		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.15.17 17.00	Basis:	Wet Weight
Seq Number:	3019913				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.15.17 18.55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.15.17 18.55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.15.17 18.55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.15.17 18.55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.15.17 18.55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.15.17 18.55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.15.17 18.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	80-120	06.15.17 18.55	
4-Bromofluorobenzene	460-00-4	105	%	80-120	06.15.17 18.55	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-C 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-020	Date Collected:	06.12.17 16.54		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.30	Basis:	Wet Weight
Seq Number:	3019987				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**61.8**	4.94	mg/kg	06.16.17 23.42		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 09.51	U	1
Diesel Range Organics	C10C28DRO	**18.7**	15.0	mg/kg	06.17.17 09.51		1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 09.51	U	1
Total TPH	PHC635	**18.7**	15.0	mg/kg	06.17.17 09.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	06.17.17 09.51	
o-Terphenyl	84-15-1	103	%	70-135	06.17.17 09.51	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**E-C 5'**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-020	Date Collected:	06.12.17 16.54		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.16.17 12.30	Basis:	Wet Weight
Seq Number:	3020004				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.16.17 18.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.16.17 18.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.16.17 18.41	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.16.17 18.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.16.17 18.41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.16.17 18.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.16.17 18.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	80-120	06.16.17 18.41	
1,4-Difluorobenzene	540-36-3	95	%	80-120	06.16.17 18.41	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**BG 0-0.5**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-021	Date Collected:	06.12.17 14.43		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	06.16.17 17.30	Basis:	Wet Weight
Seq Number:	3019987				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	06.16.17 23.50	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.16.17 16.00	Basis:	Wet Weight
Seq Number:	3020022				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.17.17 10.12	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0	mg/kg	06.17.17 10.12	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	15.0	mg/kg	06.17.17 10.12	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.17.17 10.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.17.17 10.12	
o-Terphenyl	84-15-1	101	%	70-135	06.17.17 10.12	

Certificate of Analytical Results 555245

Larson and Associates, Inc., Midland, TX

Lea State 407 #1

Sample Id:	**BG 0-0.5**	Matrix:	Soil	Date Received:	06.13.17 11.14
Lab Sample Id:	555245-021	Date Collected:	06.12.17 14.43		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.19.17 06.30	Basis:	Wet Weight
Seq Number:	3020111				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00386	0.00386	mg/kg	06.19.17 11.29	U	1
Toluene	108-88-3	**0.0115**	0.00386	mg/kg	06.19.17 11.29		1
Ethylbenzene	100-41-4	<0.00386	0.00386	mg/kg	06.19.17 11.29	U	1
m,p-Xylenes	179601-23-1	**0.00913**	0.00772	mg/kg	06.19.17 11.29		1
o-Xylene	95-47-6	<0.00386	0.00386	mg/kg	06.19.17 11.29	U	1
Total Xylenes	1330-20-7	**0.00913**	0.00386	mg/kg	06.19.17 11.29		1
Total BTEX		**0.0206**	0.00386	mg/kg	06.19.17 11.29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	80-120	06.19.17 11.29	
1,4-Difluorobenzene	540-36-3	96	%	80-120	06.19.17 11.29	

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 555245

Larson and Associates, Inc.

Lea State 407 #1

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3019985 Matrix: Solid Date Prep: 06.16.17
MB Sample Id: 726244-1-BLK LCS Sample Id: 726244-1-BKS LCSD Sample Id: 726244-1-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	241	96	242	97	90-110	0	20	mg/kg	06.16.17 18:00	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3019987 Matrix: Solid Date Prep: 06.16.17
MB Sample Id: 726245-1-BLK LCS Sample Id: 726245-1-BKS LCSD Sample Id: 726245-1-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	243	97	249	100	90-110	2	20	mg/kg	06.16.17 22:11	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3019985 Matrix: Soil Date Prep: 06.16.17
Parent Sample Id: 555232-001 MS Sample Id: 555232-001 S MSD Sample Id: 555232-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.59	249	255	100	256	101	90-110	0	20	mg/kg	06.16.17 18:23	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3019985 Matrix: Soil Date Prep: 06.16.17
Parent Sample Id: 555245-003 MS Sample Id: 555245-003 S MSD Sample Id: 555245-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	658	250	907	100	895	95	90-110	1	20	mg/kg	06.16.17 20:09	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3019987 Matrix: Soil Date Prep: 06.16.17
Parent Sample Id: 555245-014 MS Sample Id: 555245-014 S MSD Sample Id: 555245-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.10	248	264	104	265	104	90-110	0	20	mg/kg	06.16.17 22:34	

QC Summary 555245

Larson and Associates, Inc.

Lea State 407 #1

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3020022 — Matrix: Solid — Date Prep: 06.16.17
MB Sample Id: 726289-1-BLK — LCS Sample Id: 726289-1-BKS — LCSD Sample Id: 726289-1-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	975	98	1030	103	70-135	5	35	mg/kg	06.17.17 01:27	
Diesel Range Organics	<15.0	1000	980	98	1000	100	70-135	2	35	mg/kg	06.17.17 01:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	100		100		106		70-135	%	06.17.17 01:27
o-Terphenyl	105		100		102		70-135	%	06.17.17 01:27

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3020022 — Matrix: Soil — Date Prep: 06.16.17
Parent Sample Id: 555245-002 — MS Sample Id: 555245-002 S — MSD Sample Id: 555245-002 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	997	1010	101	1060	106	70-135	5	35	mg/kg	06.17.17 02:50	
Diesel Range Organics	<15.0	997	999	100	1050	105	70-135	5	35	mg/kg	06.17.17 02:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		101		70-135	%	06.17.17 02:50
o-Terphenyl	99		99		70-135	%	06.17.17 02:50

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3019910 — Matrix: Solid — Date Prep: 06.15.17
MB Sample Id: 726185-1-BLK — LCS Sample Id: 726185-1-BKS — LCSD Sample Id: 726185-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0791	78	0.0779	77	70-130	2	35	mg/kg	06.15.17 08:31	
Toluene	<0.00202	0.101	0.0771	76	0.0724	72	70-130	6	35	mg/kg	06.15.17 08:31	
Ethylbenzene	<0.00202	0.101	0.0880	87	0.0819	81	71-129	7	35	mg/kg	06.15.17 08:31	
m,p-Xylenes	<0.00403	0.202	0.150	74	0.145	72	70-135	3	35	mg/kg	06.15.17 08:31	
o-Xylene	<0.00202	0.101	0.0805	80	0.0822	81	71-133	2	35	mg/kg	06.15.17 08:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		89		101		80-120	%	06.15.17 08:31
4-Bromofluorobenzene	90		106		101		80-120	%	06.15.17 08:31

QC Summary 555245

Larson and Associates, Inc.

Lea State 407 #1

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3019913 | Matrix: Solid | Date Prep: 06.15.17
MB Sample Id: 726188-1-BLK | LCS Sample Id: 726188-1-BKS | LCSD Sample Id: 726188-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0766	77	0.0772	76	70-130	1	35	mg/kg	06.15.17 16:58	
Toluene	<0.00200	0.0998	0.0767	77	0.0764	76	70-130	0	35	mg/kg	06.15.17 16:58	
Ethylbenzene	<0.00200	0.0998	0.0909	91	0.0955	95	71-129	5	35	mg/kg	06.15.17 16:58	
m,p-Xylenes	<0.00399	0.200	0.154	77	0.161	80	70-135	4	35	mg/kg	06.15.17 16:58	
o-Xylene	<0.00200	0.0998	0.0845	85	0.0916	91	71-133	8	35	mg/kg	06.15.17 16:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		100		97		80-120	%	06.15.17 16:58
4-Bromofluorobenzene	100		103		102		80-120	%	06.15.17 16:58

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3020004 | Matrix: Solid | Date Prep: 06.16.17
MB Sample Id: 726242-1-BLK | LCS Sample Id: 726242-1-BKS | LCSD Sample Id: 726242-1-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	0.106	105	0.0990	99	70-130	7	35	mg/kg	06.16.17 13:22	
Toluene	<0.00201	0.101	0.0964	95	0.0918	92	70-130	5	35	mg/kg	06.16.17 13:22	
Ethylbenzene	<0.00201	0.101	0.107	106	0.0984	98	71-129	8	35	mg/kg	06.16.17 13:22	
m,p-Xylenes	<0.00402	0.201	0.188	94	0.176	88	70-135	7	35	mg/kg	06.16.17 13:22	
o-Xylene	<0.00201	0.101	0.109	108	0.0949	95	71-133	14	35	mg/kg	06.16.17 13:22	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		103		99		80-120	%	06.16.17 13:22
4-Bromofluorobenzene	88		105		101		80-120	%	06.16.17 13:22

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3020111 | Matrix: Solid | Date Prep: 06.19.17
MB Sample Id: 726344-1-BLK | LCS Sample Id: 726344-1-BKS | LCSD Sample Id: 726344-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.105	105	0.101	101	70-130	4	35	mg/kg	06.19.17 08:20	
Toluene	<0.00199	0.0996	0.0888	89	0.0891	89	70-130	0	35	mg/kg	06.19.17 08:20	
Ethylbenzene	<0.00199	0.0996	0.106	106	0.101	101	71-129	5	35	mg/kg	06.19.17 08:20	
m,p-Xylenes	<0.00398	0.199	0.163	82	0.173	87	70-135	6	35	mg/kg	06.19.17 08:20	
o-Xylene	<0.00199	0.0996	0.0986	99	0.0960	96	71-133	3	35	mg/kg	06.19.17 08:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		85		96		80-120	%	06.19.17 08:20
4-Bromofluorobenzene	104		104		102		80-120	%	06.19.17 08:20

QC Summary 555245

Larson and Associates, Inc.

Lea State 407 #1

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3019910 | Matrix: Soil | Date Prep: 06.15.17
Parent Sample Id: 555245-002 | MS Sample Id: 555245-002 S | MSD Sample Id: 555245-002 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	0.0572	57	0.0546	55	70-130	5	35	mg/kg	06.15.17 09:03	X
Toluene	<0.00201	0.101	0.0740	73	0.0537	54	70-130	32	35	mg/kg	06.15.17 09:03	X
Ethylbenzene	<0.00201	0.101	0.0634	63	0.0617	62	71-129	3	35	mg/kg	06.15.17 09:03	X
m,p-Xylenes	<0.00402	0.201	0.111	55	0.105	53	70-135	6	35	mg/kg	06.15.17 09:03	X
o-Xylene	<0.00201	0.101	0.0646	64	0.0620	62	71-133	4	35	mg/kg	06.15.17 09:03	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		87		80-120	%	06.15.17 09:03
4-Bromofluorobenzene	111		113		80-120	%	06.15.17 09:03

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3019913 | Matrix: Soil | Date Prep: 06.15.17
Parent Sample Id: 555245-019 | MS Sample Id: 555245-019 S | MSD Sample Id: 555245-019 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0444	45	0.0444	44	70-130	0	35	mg/kg	06.15.17 17:32	X
Toluene	<0.00199	0.0994	0.0493	50	0.0437	44	70-130	12	35	mg/kg	06.15.17 17:32	X
Ethylbenzene	<0.00199	0.0994	0.0731	74	0.0605	61	71-129	19	35	mg/kg	06.15.17 17:32	X
m,p-Xylenes	<0.00398	0.199	0.0963	48	0.103	52	70-135	7	35	mg/kg	06.15.17 17:32	X
o-Xylene	<0.00199	0.0994	0.0753	76	0.0618	62	71-133	20	35	mg/kg	06.15.17 17:32	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	83		106		80-120	%	06.15.17 17:32
4-Bromofluorobenzene	111		118		80-120	%	06.15.17 17:32

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3020004 | Matrix: Soil | Date Prep: 06.16.17
Parent Sample Id: 555245-006 | MS Sample Id: 555245-006 S | MSD Sample Id: 555245-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00366	0.183	0.0721	39	0.122	65	70-130	51	35	mg/kg	06.16.17 13:55	XF
Toluene	0.0147	0.183	0.0434	16	0.0903	40	70-130	70	35	mg/kg	06.16.17 13:55	XF
Ethylbenzene	0.330	0.183	0.138	0	0.309	0	71-129	77	35	mg/kg	06.16.17 13:55	XF
m,p-Xylenes	1.04	0.366	0.530	0	1.21	46	70-135	78	35	mg/kg	06.16.17 13:55	XF
o-Xylene	0.420	0.183	0.231	0	0.531	59	71-133	79	35	mg/kg	06.16.17 13:55	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	83		107		80-120	%	06.16.17 13:55
4-Bromofluorobenzene	243	**	443	**	80-120	%	06.16.17 13:55

QC Summary 555245

Larson and Associates, Inc.

Lea State 407 #1

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

Seq Number: 3020111 Matrix: Soil Date Prep: 06.19.17

Parent Sample Id: 555245-021 MS Sample Id: 555245-021 S MSD Sample Id: 555245-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00389	0.195	0.175	90	0.181	91	70-130	3	35	mg/kg	06.19.17 09:02	
Toluene	0.0115	0.195	0.157	75	0.170	80	70-130	8	35	mg/kg	06.19.17 09:02	
Ethylbenzene	<0.00389	0.195	0.171	88	0.168	85	71-129	2	35	mg/kg	06.19.17 09:02	
m,p-Xylenes	0.00913	0.389	0.297	74	0.300	74	70-135	1	35	mg/kg	06.19.17 09:02	
o-Xylene	<0.00389	0.195	0.161	83	0.167	84	71-133	4	35	mg/kg	06.19.17 09:02	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		94		80-120	%	06.19.17 09:02
4-Bromofluorobenzene	103		115		80-120	%	06.19.17 09:02

CHAIN-OF-CUSTODY

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

Data Reported to: 555245

DATE: 6-13-17 PAGE 1 OF 2

PO #: _____ LAB WORK ORDER #: _____

PROJECT LOCATION OR NAME: lea state 107 #1

LAI PROJECT #: 17-0157-01 COLLECTOR: Travis Williams

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: NM

(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	FIELD NOTES
W-W 0-0.5'		6-12-17	2:30	S	1				/		BTEX ☐ MTBE ☐ TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☑ DRO ☑ 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 ☐	
5'			5:00									
W-N 0-0.5'			2:25									
5'			4:45									
W-E 0-0.5'			2:08									
5'			4:40									
W-S 0-0.5'			2:34									
5'			5:15									
W-C 0-0.5'			3:40									
5'			2:40									
E-N 0-0.5'			1:40									
5'			3:55									
E-E 0-0.5'			2:15									
5'			4:00									
E-S 0-0.5'			2:00									
TOTAL												

Temp: 3.3 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 3.1

RELINQUISHED BY:(Signature) DATE/TIME 6-13-17 11:14 RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature) 6/13/17

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

Xenco - Direct Bill to Enviro Clean - Julie

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

LABORATORY USE ONLY:
RECEIVING TEMP: _____ THERM #: _____
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

CHAIN-OF-CUSTODY

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

Data Reported to: 5555245

DATE: 6-12-17 (13) PAGE 2 OF 2

PO #: _____ LAB WORK ORDER #: _____

PROJECT LOCATION OR NAME: lea state 407 #1

LAI PROJECT #: 17-0157-01 COLLECTOR: Travis Williams

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: NM

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
E-S 5'		6-12-17	4:20	S	1				✓		✓
E-W 0-0.5			1:53								
2'			4:18								
5'			4:19								
E-C 5'			2:20								
BG											

ANALYSES: BTEX ☑ MTBE ☐ | TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☑ | DIESEL - MOD 8015 ☑ OEG ☑ | 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 ☐ 300

FIELD NOTES

TOTAL

Temp: 3.3 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 3.1

RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
[signature]	6-13-17	11:14 [signature] 6/13/17
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)

Xenco - Rush Bill to EnviroClean - Julie

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

LABORATORY USE ONLY:
RECEIVING TEMP: _____ THERM #: _____
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 06/13/2017 11:14:00 AM

Work Order #: 555245

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : r8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seal present on shipping container/ cooler?	**N/A**	
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#6 Custody Seals intact on sample bottles?	**N/A**	
#7 *Custody Seals Signed and dated?	**N/A**	
#8 *Chain of Custody present?	**Yes**	
#9 Sample instructions complete on Chain of Custody?	**Yes**	
#10 Any missing/extra samples?	**Yes**	
#11 Chain of Custody signed when relinquished/ received?	**Yes**	
#12 Chain of Custody agrees with sample label(s)?	**Yes**	
#13 Container label(s) legible and intact?	**Yes**	
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#15 Samples in proper container/ bottle?	**Yes**	
#16 Samples properly preserved?	**Yes**	
#17 Sample container(s) intact?	**Yes**	
#18 Sufficient sample amount for indicated test(s)?	**Yes**	
#19 All samples received within hold time?	**Yes**	
#20 Subcontract of sample(s)?	**N/A**	houston
#21 VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Marithza Anaya Date: 06/13/2017
Marithza Anaya

Checklist reviewed by: Holly Taylor Date: 06/14/2017
Holly Taylor

Certificate of Analysis Summary 557201

Larson and Associates, Inc., Midland, TX

Project Name: Fourty Acres

Project Id: 17-0157-01
Contact: Mark Larson
Project Location:

Date Received in Lab: Tue Jul-11-17 09:31 am
Report Date: 18-JUL-17
Project Manager: Brandi Ritcherson

Analysis Requested													
	Lab Id:	557201-001		557201-002		557201-003		557201-004		557201-005		557201-006	
	Field Id:	WE- W		WE- N		WE-S		WE-E		WE-B		WE-2B	
	Depth:	5 ft		5 ft		5 ft		5 ft		10 ft		12 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-10-17 17:10		Jul-10-17 17:14		Jul-10-17 17:20		Jul-10-17 17:23		Jul-10-17 17:50		Jul-10-17 18:45	
Chloride by EPA 300	***Extracted:***	Jul-14-17 15:00		Jul-14-17 15:00		Jul-14-17 15:00		Jul-14-17 15:00		Jul-14-17 15:00		Jul-14-17 15:00	
	Analyzed:	Jul-14-17 17:47		Jul-14-17 18:10		Jul-14-17 18:18		Jul-14-17 18:25		Jul-14-17 18:33		Jul-14-17 18:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		23.9	4.97	18.9	4.93	17.7	4.99	49.9	4.92	189	4.90	193	4.87
TPH By SW8015 Mod	***Extracted:***	Jul-11-17 11:00		Jul-11-17 11:00		Jul-11-17 11:00		Jul-11-17 11:00		Jul-11-17 11:00		Jul-11-17 11:00	
	Analyzed:	Jul-11-17 20:47		Jul-12-17 07:03		Jul-11-17 22:09		Jul-11-17 22:29		Jul-11-17 22:50		Jul-11-17 23:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	54.4	15.0	50.4	15.0	<15.0	15.0	58.2	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	54.4	15.0	50.4	15.0	<15.0	15.0	58.2	15.0	<15.0	15.0

Brandi Ritcherson
Project Manager

Certificate of Analysis Summary 557201

Larson and Associates, Inc., Midland, TX

Project Name: Fourty Acres

Project Id: 17-0157-01
Contact: Mark Larson
Project Location:

Date Received in Lab: Tue Jul-11-17 09:31 am
Report Date: 18-JUL-17
Project Manager: Brandi Ritcherson

Analysis Requested									
	Lab Id:	557201-007		557201-008		557201-009			
	Field Id:	WN-1		WN-2		WN-3			
	Depth:	7 ft		10 ft		12 ft			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Jul-10-17 18:10		Jul-10-17 18:20		Jul-10-17 18:30			
Chloride by EPA 300	***Extracted:***	Jul-14-17 15:00		Jul-14-17 15:00		Jul-14-17 15:00			
	Analyzed:	Jul-14-17 19:04		Jul-14-17 19:12		Jul-14-17 19:19			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		592	4.97	587	4.94	428	4.87		
TPH By SW8015 Mod	***Extracted:***	Jul-11-17 11:00		Jul-11-17 11:00		Jul-11-17 11:00			
	Analyzed:	Jul-11-17 23:31		Jul-11-17 23:52		Jul-12-17 00:12			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0		
Diesel Range Organics (DRO)		361	15.0	<15.0	15.0	<15.0	15.0		
Oil Range Hydrocarbons (ORO)		75.5	15.0	<15.0	15.0	<15.0	15.0		
Total TPH		437	15.0	<15.0	15.0	<15.0	15.0		

Brandi Ritcherson
Project Manager

Analytical Report 557201

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Fourty Acres

17-0157-01

18-JUL-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

18-JUL-17

Project Manager: **Mark Larson**
Larson and Associates, Inc.
P. O. Box 50685
Midland, TX 79710

Reference: XENCO Report No(s): **557201**
Fourty Acres
Project Address:

Mark Larson :

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) 557201. 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. 557201 will be filed for 60 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,

Brandi Ritcherson
Project Manager

Sample Cross Reference 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
WE- W	S	07-10-17 17:10	- 5 ft	557201-001
WE- N	S	07-10-17 17:14	- 5 ft	557201-002
WE-S	S	07-10-17 17:20	- 5 ft	557201-003
WE-E	S	07-10-17 17:23	- 5 ft	557201-004
WE-B	S	07-10-17 17:50	- 10 ft	557201-005
WE-2B	S	07-10-17 18:45	- 12 ft	557201-006
WN-1	S	07-10-17 18:10	- 7 ft	557201-007
WN-2	S	07-10-17 18:20	- 10 ft	557201-008
WN-3	S	07-10-17 18:30	- 12 ft	557201-009

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id:	**WE- W**	Matrix:	Soil	Date Received:	07.11.17 09.31
Lab Sample Id:	557201-001	Date Collected:	07.10.17 17.10	Sample Depth:	5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.14.17 15.00	Basis:	Wet Weight
Seq Number:	3022462				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**23.9**	4.97	mg/kg	07.14.17 17.47		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.11.17 11.00	Basis:	Wet Weight
Seq Number:	3022003				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.11.17 20.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.11.17 20.47	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.11.17 20.47	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.11.17 20.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	07.11.17 20.47	
o-Terphenyl	84-15-1	111	%	70-135	07.11.17 20.47	

Certificate of Analytical Results 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id:	**WE- N**	Matrix:	Soil	Date Received:	07.11.17 09.31
Lab Sample Id:	557201-002	Date Collected:	07.10.17 17.14	Sample Depth:	5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.14.17 15.00	Basis:	Wet Weight
Seq Number:	3022462				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.9**	4.93	mg/kg	07.14.17 18.10		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.11.17 11.00	Basis:	Wet Weight
Seq Number:	3022003				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.12.17 07.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	**54.4**	15.0	mg/kg	07.12.17 07.03		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.12.17 07.03	U	1
Total TPH	PHC635	**54.4**	15.0	mg/kg	07.12.17 07.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	07.12.17 07.03	
o-Terphenyl	84-15-1	112	%	70-135	07.12.17 07.03	

Certificate of Analytical Results 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id:	**WE-S**	Matrix:	Soil	Date Received:	07.11.17 09.31
Lab Sample Id:	557201-003	Date Collected:	07.10.17 17.20	Sample Depth:	5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.14.17 15.00	Basis:	Wet Weight
Seq Number:	3022462				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**17.7**	4.99	mg/kg	07.14.17 18.18		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.11.17 11.00	Basis:	Wet Weight
Seq Number:	3022003				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.11.17 22.09	U	1
Diesel Range Organics (DRO)	C10C28DRO	**50.4**	15.0	mg/kg	07.11.17 22.09		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.11.17 22.09	U	1
Total TPH	PHC635	**50.4**	15.0	mg/kg	07.11.17 22.09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	07.11.17 22.09	
o-Terphenyl	84-15-1	124	%	70-135	07.11.17 22.09	

Certificate of Analytical Results 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id:	**WE-E**	Matrix:	Soil	Date Received:	07.11.17 09.31
Lab Sample Id:	557201-004	Date Collected:	07.10.17 17.23	Sample Depth:	5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.14.17 15.00	Basis:	Wet Weight
Seq Number:	3022462				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.9**	4.92	mg/kg	07.14.17 18.25		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.11.17 11.00	Basis:	Wet Weight
Seq Number:	3022003				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.11.17 22.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.11.17 22.29	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.11.17 22.29	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.11.17 22.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	07.11.17 22.29	
o-Terphenyl	84-15-1	117	%	70-135	07.11.17 22.29	

Certificate of Analytical Results 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id:	**WE-B**	Matrix:	Soil	Date Received:	07.11.17 09.31
Lab Sample Id:	557201-005	Date Collected:	07.10.17 17.50	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.14.17 15.00	Basis:	Wet Weight
Seq Number:	3022462				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**189**	4.90	mg/kg	07.14.17 18.33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.11.17 11.00	Basis:	Wet Weight
Seq Number:	3022003				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.11.17 22.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	**58.2**	15.0	mg/kg	07.11.17 22.50		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.11.17 22.50	U	1
Total TPH	PHC635	**58.2**	15.0	mg/kg	07.11.17 22.50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	07.11.17 22.50	
o-Terphenyl	84-15-1	127	%	70-135	07.11.17 22.50	

Certificate of Analytical Results 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id:	**WE-2B**	Matrix:	Soil	Date Received:	07.11.17 09.31
Lab Sample Id:	557201-006	Date Collected:	07.10.17 18.45	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.14.17 15.00	Basis:	Wet Weight
Seq Number:	3022462				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**193**	4.87	mg/kg	07.14.17 18.56		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.11.17 11.00	Basis:	Wet Weight
Seq Number:	3022003				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.11.17 23.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.11.17 23.11	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.11.17 23.11	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.11.17 23.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	07.11.17 23.11	
o-Terphenyl	84-15-1	107	%	70-135	07.11.17 23.11	

Certificate of Analytical Results 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id:	**WN-1**	Matrix:	Soil	Date Received:	07.11.17 09.31
Lab Sample Id:	557201-007	Date Collected:	07.10.17 18.10	Sample Depth:	7 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.14.17 15.00	Basis:	Wet Weight
Seq Number:	3022462				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**592**	4.97	mg/kg	07.14.17 19.04		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.11.17 11.00	Basis:	Wet Weight
Seq Number:	3022003				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.11.17 23.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	**361**	15.0	mg/kg	07.11.17 23.31		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**75.5**	15.0	mg/kg	07.11.17 23.31		1
Total TPH	PHC635	**437**	15.0	mg/kg	07.11.17 23.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	07.11.17 23.31	
o-Terphenyl	84-15-1	124	%	70-135	07.11.17 23.31	

Certificate of Analytical Results 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id:	**WN-2**	Matrix:	Soil	Date Received:	07.11.17 09.31
Lab Sample Id:	557201-008	Date Collected:	07.10.17 18.20	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.14.17 15.00	Basis:	Wet Weight
Seq Number:	3022462				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**587**	4.94	mg/kg	07.14.17 19.12		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.11.17 11.00	Basis:	Wet Weight
Seq Number:	3022003				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.11.17 23.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.11.17 23.52	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.11.17 23.52	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.11.17 23.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	07.11.17 23.52	
o-Terphenyl	84-15-1	109	%	70-135	07.11.17 23.52	

Certificate of Analytical Results 557201

Larson and Associates, Inc., Midland, TX

Fourty Acres

Sample Id:	**WN-3**	Matrix:	Soil	Date Received:	07.11.17 09.31
Lab Sample Id:	557201-009	Date Collected:	07.10.17 18.30	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.14.17 15.00	Basis:	Wet Weight
Seq Number:	3022462				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**428**	4.87	mg/kg	07.14.17 19.19		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.11.17 11.00	Basis:	Wet Weight
Seq Number:	3022003				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.12.17 00.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.12.17 00.12	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.12.17 00.12	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.12.17 00.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	07.12.17 00.12	
o-Terphenyl	84-15-1	113	%	70-135	07.12.17 00.12	

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 557201

Larson and Associates, Inc.

Fourty Acres

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3022462 Matrix: Solid Date Prep: 07.14.17
MB Sample Id: 727761-1-BLK LCS Sample Id: 727761-1-BKS LCSD Sample Id: 727761-1-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	262	105	261	104	90-110	0	20	mg/kg	07.14.17 16:50	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3022462 Matrix: Soil Date Prep: 07.14.17
Parent Sample Id: 556809-001 MS Sample Id: 556809-001 S MSD Sample Id: 556809-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	78.4	250	359	112	358	112	90-110	0	20	mg/kg	07.14.17 19:42	X

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3022462 Matrix: Soil Date Prep: 07.14.17
Parent Sample Id: 557201-001 MS Sample Id: 557201-001 S MSD Sample Id: 557201-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.9	497	542	104	543	104	90-110	0	20	mg/kg	07.14.17 17:55	

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3022003 Matrix: Solid Date Prep: 07.11.17
MB Sample Id: 727484-1-BLK LCS Sample Id: 727484-1-BKS LCSD Sample Id: 727484-1-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 (GRO)	<15.0	1000	1080	108	1110	111	70-135	3	35	mg/kg	07.11.17 20:06	
Diesel Range Organics (DRO)	<15.0	1000	1030	103	1040	104	70-135	1	35	mg/kg	07.11.17 20:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		113		118		70-135	%	07.11.17 20:06
o-Terphenyl	123		115		117		70-135	%	07.11.17 20:06

QC Summary 557201

Larson and Associates, Inc.

Fourty Acres

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P

Seq Number: 3022003 Matrix: Soil Date Prep: 07.11.17

Parent Sample Id: 557201-001 MS Sample Id: 557201-001 S MSD Sample Id: 557201-001 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 (GRO)	<15.0	998	1160	116	1100	110	70-135	5	35	mg/kg	07.11.17 21:07	
Diesel Range Organics (DRO)	<15.0	998	1130	113	1090	109	70-135	4	35	mg/kg	07.11.17 21:07	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		110		70-135	%	07.11.17 21:07
o-Terphenyl	122		110		70-135	%	07.11.17 21:07

CHAIN-OF-CUSTODY

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

Data Reported to:

DATE: 7-11-2017 PAGE 1 OF 1
PO #: LAB WORK ORDER #: 55720l
PROJECT LOCATION OR NAME: Fourty Acres
LAI PROJECT #: 17-0157-01 COLLECTOR: Zach Byers

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: NM

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	FIELD NOTES
WE-W		7/10	17:10	S	1				✓		✓	5' on wall
WE-N			17:14		1						✓	bottom @ 10'
WE-S			17:20		1						✓	bottom @ 12'
WE-E			17:23		1						✓	@ 7'
WE-B			17:50		1						✓	@ 10'
WE-2B			18:45		1						✓	@ 12'
WN-1			18:10		1						✓	
WN-2			18:20		1						✓	
WN-3			18:30		1						✓	

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 ☐

TOTAL

Temp: 6.0 IR ID:R-8
CF:(0-6: -0.2°C) (6-23: +0.2°C)
Corrected Temp: 4.0

RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
[signature]	7/11 9:31	Shawnee Smith
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 ☐

LABORATORY
RECEIVING TEMP: _____ THERM #: _____
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 07/11/2017 09:31:00 AM

Work Order #: 557201

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	5.7
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**N/A**
#21 VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: ss

PH Device/Lot#:

Checklist completed by: Shawnee Smith Date: 07/11/2017

Shawnee Smith

Checklist reviewed by: Brandi Ritcherson Date: 07/11/2017

Brandi Ritcherson