Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	nRM2019638426
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	600 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nRM2019638426
District RP	
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Application ID	

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

Printed Name: Andrew Parker Title: Env. Scientist

Signature: Andrew Parker Date: 11/30/2020

email: AParker@advanceenergypartners.com Telephone: 970-570-9535

OCD Only

Received by: Cristina Eads Date: 12/10/2020

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	nRM2019638426
District RP	
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Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- [x] Detailed description of proposed remediation technique
- [x] Scaled sitemap with GPS coordinates showing delineation points
- [x] Estimated volume of material to be remediated
- [x] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [x] Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- [x] Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

- [x] Extents of contamination must be fully delineated.

- [x] Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Andrew Parker Title: Env. Scientist

Signature: Andrew Parker Date: 11/30/2020

email: AParker@advanceenergypartners.com Telephone: 970-570-9535

OCD Only

Received by: Cristina Eads Date: 12/10/2020

☐ Approved ☑ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Cristina Eads Date: 02/19/2021

nRM2019638426
REMEDIATION DEFERRAL REQUEST
Dagger State Com #504H
Produced Water Release
Lea County, New Mexico

Latitude: 32.4487925° North
Longitude: -103.6063424° West

LAI Project No. 20-0100-05

October 20, 2020

Prepared for:
Select Energy Services, LLC
5721 NW 132nd Street
Oklahoma City, OK 73142

Prepared by:
Larson & Associates, Inc.
507 North Marienfeld Street, Suite 202
Midland, Texas 79701

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

Robert Nelson
Sr. Geoscientist

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Table of Contents

Tables

Figures

Appendices

1.0 INTRODUCTION

Larson & Associates, Inc., (LAI), on behalf of Select Energy Services, LLC (Select), submits this remediation deferral request to the New Mexico Oil Conservation Division (OCD) District 1 for a produced water spill at the Dagger State Com #504H (Site) located in Unit I (NE/4, SE/4), Section 30, Township 21 South, Range 33 East in Lea County, New Mexico. The surface and mineral owner is the State of New Mexico administered by the New Mexico State Land Office (SLO). The geodetic position is North 32.4487925° and West -103.6063424°. Figure 1 presents a topographic map.

1.1 Background

The release was discovered on June 23, 2020. The spill occurred due to human error resulting in approximately 100 barrels (bbls) of produced water to be released onto the lined containment and nearby earthen embankment that ultimately washed out into a lined pit. Approximately 90 bbls were recovered. Inspection of the liner revealed no major defects. The affected area on the liner measures approximately 17,661 square feet and approximately 2,309 square feet on the earthen embankment. The initial C-141 was submitted to OCD District 1 and was assigned incident number nRM2019638426. Appendix A presents the initial C-141.

1.2 Physical Setting

The Physical Setting is as follows:

- The surface elevation is approximately 3,848 feet above mean sea level (msl).
- The topography slopes to the southeast.
- There are no surface water features within 1,000 feet of the site.
- Karst data provided by the USGS describes the Site as “Low Risk” potential.
- The soils are designated as “Kermit soils and Dune land, 0 to 12 percent slopes”, consisting of 0 to 60 inches of fine sand.
- The surface geology is designated quaternary age eolian sand, deposited in dunes, dune ridges, and sheets undivided (USGS).
- Groundwater occurs in the Ogallala formation at approximately 600 feet bgs (1996);
- According to the New Mexico Office of the State Engineer (OSE) the nearest freshwater well is located in Section 33, Township 21 South, Range 33 East approximately 1.86 miles or 9,800 feet southeast of the site.

Appendix B presents the OSE Well Log. Appendix C presents the USGS Karst data and site location

1.3 Remediation Action Levels

The following remediation standards are based on closure criteria for soils impacted by a release as presented in Table 1 of 19.15.29 NMAC:

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 2,500 mg/Kg
- Chloride 20,00 mg/Kg

Further, 19.15.29.13 NMAC (Restoration, Reclamation and Re-Vegetation) requires the operator to restore the impacted surface area that existed prior to the release or their final land use.

2.0 DELINEATION

On June 25, 2020 and August 28, 2020, LAI personnel used a stainless-steel hand auger to collect soil samples from eight (8) locations within the spill area and in each cardinal direction of the spill (S-1 through S-8). The samples were collected between approximately 0.5 and 1 foot below ground surface (bgs) and were delivered under chain of custody and preservation to Permian Basin Environmental Laboratory (PBEL) in Midland, Texas. The laboratory analyzed the samples for benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH), including gasoline range organics (C6-C12), diesel range organics (>C12-C28), and oil range organics (>C28-C35), and chloride by EPA SW-846 Methods 8021B and 8015M, and M300, respectively. Table 1 presents the laboratory analytical data summary. Figure 2 presents a focused aerial map showing the spill boundaries and sample locations.

On August 28, 2020, LAI personnel utilized a Geoprobe® 7822DT direct push rig to further delineate the spill. Soil samples were collected at four (4) locations (S-9 through S-12), and were analyzed by PBEL.

Benzene and BTEX were below the OCD remediation levels (19.15.29 NMAC Table 1) of 10 milligrams per kilogram (mg/Kg) and 50 mg/Kg, respectively. TPH was below the OCD remediation limit (2,500 mg/Kg) but exceeded the OCD surface restoration level (19.15.29.13 NMAC) of 100 mg/Kg in the upper four (4) feet in the following samples:

Sample	Depth (Feet)	TPH (mg/Kg)
S-1	1	152
S-2	1	178
S-3	0.5	142
S-4	1	109

Chloride was below the OCD remediation limit (20,000 mg/Kg) but exceeded the OCD surface restoration (19.15.29.13 NMAC) limit of 600 mg/Kg in the upper four (4) feet in the following samples:

Sample	Depth (Feet)	Chloride (mg/Kg)
S-1	0.5	9,720
	1	7,970
	3	702
S-2	0.5	13,400
	1	7,250
S-3	0.5	7,500
	1	7,720
S-4	0.5	7,960
	1	1,630

Appendix D presents the laboratory reports.

3.0 REMEDIATION DEFERRAL REQUEST

Select requests approval to defer remediation until removal of high pressure lay flat lines that supply water for flowback operations and the decommission and closure of the produced water recycling containment. The presence of this equipment prohibits excavation without risking damage to equipment, jeopardizing the structural integrity of the containment berm, and causing further environmental impacts. Appendix E presents photographic documentation.

Select proposes the following remedial actions upon removal of the lay flat line and decommission and closure of the recycling containment:

- Excavate soil from an area measuring approximately 1,645 square feet, encompassing S-1, S-2, and S-9 to approximately 3 feet bgs;
- Excavate soil from an area measuring approximately 590 square feet, encompassing S-4 and S-12 to approximately 1.5 feet bgs;
- Excavate soil from an area measuring approximately 861 square feet, encompassing S-3 to approximately 1-foot bgs;
- Collect five (5) point composite bottom and sidewall confirmation soil samples not to exceed an area of 200 square feet within the excavation and analyze for BTEX, TPH, and chloride;
- Backfill excavations with clean material assuming achievement of OCD remediation levels; and
- Prepare reports with photographs for submittal to OCD District I.

Figure 3 presents the proposed excavation areas.

Tables

Table 1
Soil Sample Analytical Data Summary
Select Energy Services, Dagger Lake Pit
Lea County, New Mexico
North 32° 26' 55.15", West 103° 36' 22.52"

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Cl- (mg/Kg)
Remediation Level:				**10**	**50**				**100/2,500**	**600/20,000**
S-1	0.5	6/25/2020	In-Situ	<0.00110	<0.00100	<27.5	38.9	<27.5	38.9	**9,720**
	1	6/25/2020	In-Situ	<0.00109	<0.00109	<27.2	<27.2	<27.2	<27.2	**9,530**
	1	8/28/2020	In-Situ	<0.00108	<0.00108	<26.9	43.8	108	**152**	**7,970**
	3	8/28/2020	In-Situ	<0.00108	<0.00108	<26.9	50.6	<26.9	50.6	**702**
	5	8/28/2020	In-Situ	--	--	--	--	--	--	50.1
S-2	0.5	6/25/2020	In-Situ	<0.00112	<0.00112	<28.1	<28.1	<28.1	<28.1	**13,400**
	1	6/25/2020	In-Situ	<0.00109	<0.00109	45.1	60.8	71.7	**178**	**8,020**
	1	8/28/2020	In-Situ	<0.00108	<0.00108	<26.9	<26.9	91.5	91.5	**7,250**
	3	8/28/2020	In-Situ	<0.00111	<0.00111	<27.8	31.6	50.9	82.6	364
S-3	0.5	6/25/2020	In-Situ	<0.00109	<0.00109	50.8	34.8	56.7	**142**	**7,500**
	1	6/25/2020	In-Situ	<0.00109	<0.00109	<27.2	<27.2	<27.2	<27.2	**7,720**
	1	8/28/2020	In-Situ	<0.00105	<0.00105	<26.3	<26.3	<26.3	<26.3	577
S-4	0.5	6/25/2020	In-Situ	<0.00108	<0.00108	<26.9	<26.9	<26.9	<26.9	**7,960**
	1	6/25/2020	In-Situ	<0.00108	<0.00108	<26.9	<26.9	<26.9	<26.9	**9,160**
	1	8/28/2020	In-Situ	<0.00103	<0.00103	<25.8	78.2	31.3	**109**	**1,630**
	3	8/28/2020	In-Situ	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	9.48
S-5	0.5	6/25/2020	In-Situ	<0.00100	<0.00100	<25.0	<25.0	<25.0	<25.0	63.5
	1	6/25/2020	In-Situ	<0.00100	<0.00100	<25.0	<25.0	<25.0	<25.0	10.5
S-6	0.5	6/25/2020	In-Situ	<0.00100	<0.00100	<25.0	<25.0	<25.0	<25.0	47.7
	1	6/25/2020	In-Situ	<0.00100	<0.00100	<25.0	<25.0	<25.0	<25.0	46.7

Table 1
Soil Sample Analytical Data Summary
Select Energy Services, Dagger Lake Pit
Lea County, New Mexico
North 32° 26' 55.15", West 103° 36' 22.52"

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Cl- (mg/Kg)
Remediation Level:				**10**	**50**				**100/2,500**	**600/20,000**
S-7	0.5	6/25/2020	In-Situ	<0.00100	<0.00100	<25.0	<25.0	<25.0	<25.0	17.7
	1	6/25/2020	In-Situ	<0.00100	<0.00100	<25.0	<25.0	<25.0	<25.0	15.5
S-8	0.5	6/25/2020	In-Situ	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	63.9
	1	6/25/2020	In-Situ	<0.00100	<0.00100	<25.0	<25.0	<25.0	<25.0	29.5
S-9	1	8/28/2020	In-Situ	<0.00109	<0.00109	<27.2	<27.2	<27.2	<27.2	75.8
S-10	1	8/28/2020	In-Situ	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	28.7
S-11	1	8/28/2020	In-Situ	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	456
S-12	1	8/28/2020	In-Situ	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	36.7

Notes: Laboratory analysis performed by Permian Basin Environmental Lab (PBEL), Midland, Texas by EPA Method 8021B (BTEX), 8015M (TPH), and 300 (chloride).
Depth in feet below ground surface (bgs)
mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)
Bold and highlighted exceeds OCD remediation action limits

Figures

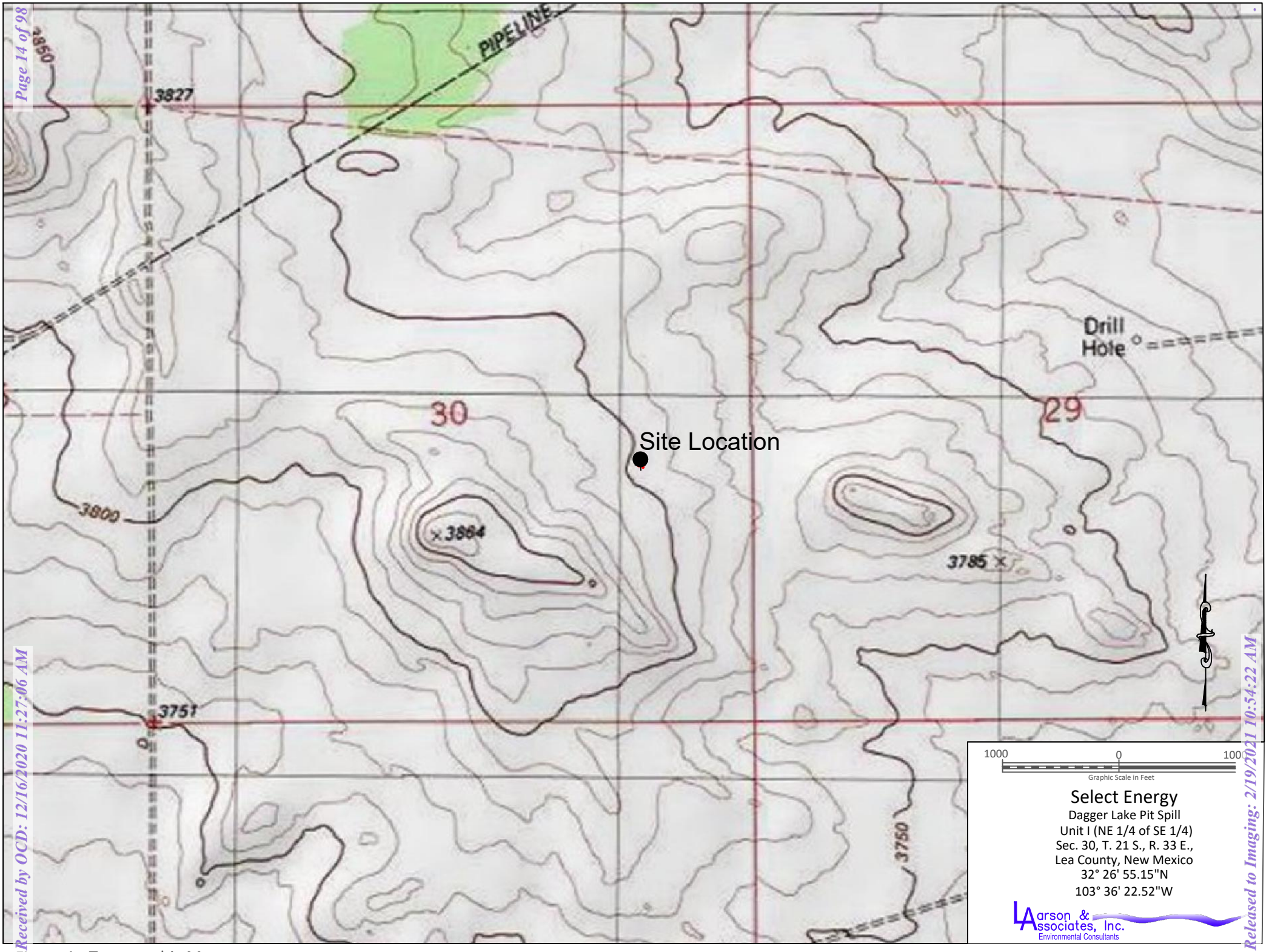

Figure 1 - Topographic Map

Figure 2a - Zoomed in Aerial Map

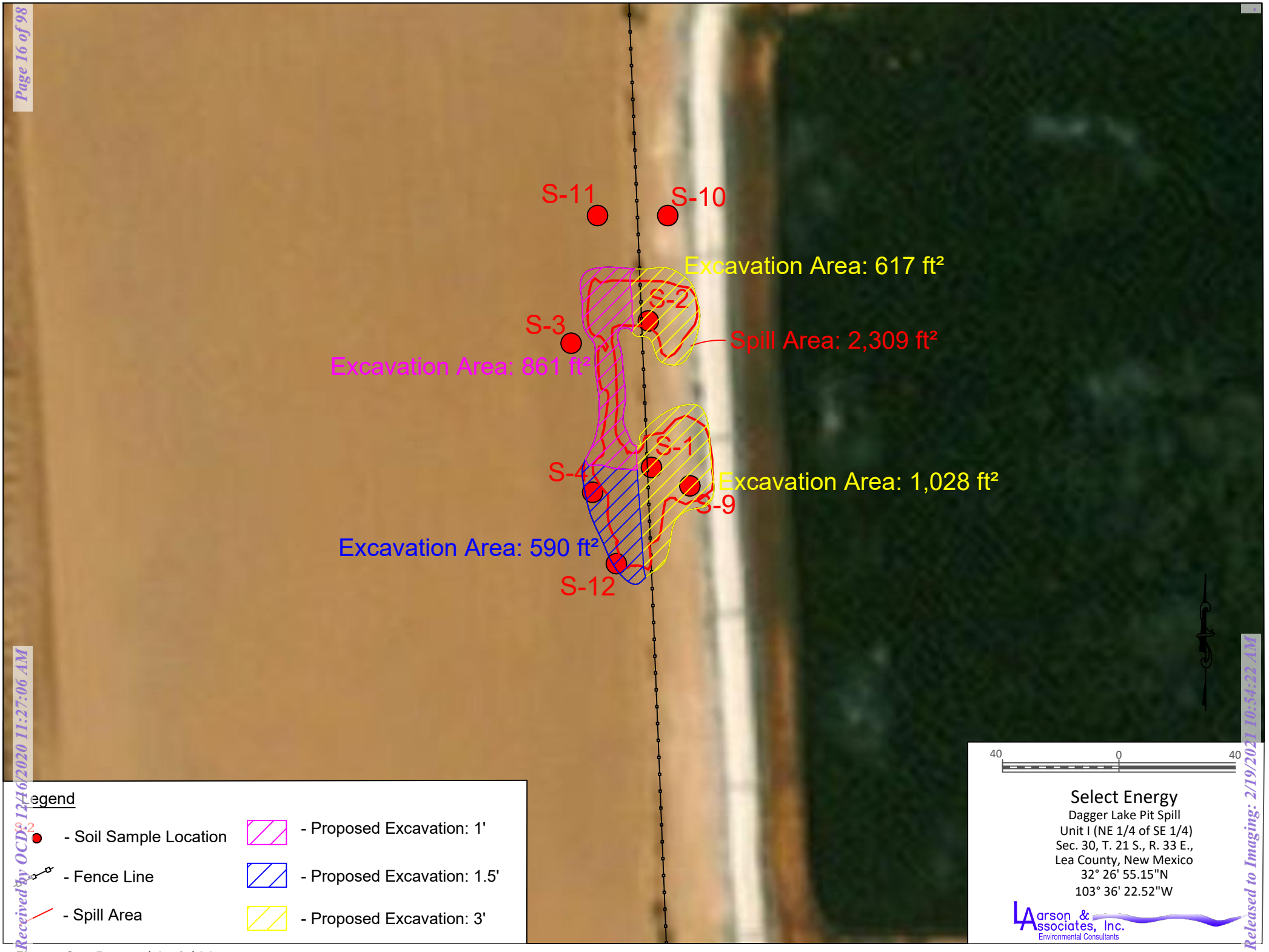

Figure 2a - Focused Aerial Map

Appendix A

Initial C-141

Form C-141
Page 1

State of New Mexico
Oil Conservation Division

Incident ID	NRM2019638426
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Advance Energy Partners Hat Mesa LLC	OGRID: 372417
Contact Name: David Harwell	Contact Telephone: 281-235-3431
Contact email: DHarwell@advanceenergypartners.com	Incident # *(assigned by OCD)*
Contact mailing address: 11490 Westheimer Rd. Suite 950. Houston, TX 77077	

Location of Release Source

Latitude 32.4487925 Longitude -103.6063424
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Dagger Recycling Containment and Recycling Facility	Site Type: Layflat Flow Line
Date Release Discovered: 06/23/2020 @ 17:00 hrs	API# Adjacent to 30-025-43302 (Dagger State Com 504H)

Unit Letter	Section	Township	Range	County
I	30	21S	33E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls) :	Volume Recovered (bbls):
☒ Produced Water	Volume Released (bbls) 100 (net of 10)	Volume Recovered (bbls): 90 (vacuum truck)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Failure to shut valve on layflat flowline. Produced water was being transferred from the Dagger Recycling Containment to Goodnight Midstream's saltwater gathering system. Ninety barrels (90 bbls) of the release was contained on a synthetic liner associated with adjacent ASTs.

Volume calculations are from the meter on the vac truck and release area outside the footprint of the synthetic liner. Volume calculations attached for area outside of the liner footprint.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2019638426
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? 100 barrels of produced water was released. 90 barrels released onto synthetic liner recovered by vacuum truck. Net release 10 barrels.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Immediate notice was not given. Further evaluation of data collected subsequent to the initial release indicated that a major release occurred.

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Andrew Parker (R.T. Hicks Consultants) Title: Sr. Env. Specialist

Signature: Andrew Parker Date: July 7, 2020

email: andrew@rthicksconsult.com Telephone: 970-570-9535

OCD Only

Received by: Ramona Marcus Date: 7/14/2020

NRM2019638426

Spill Dimensions to Volume of Release Area outside footprint of Liner			
Input	**volume of affected soil**	**[feet^3]**	1065.00
Input	Porosity: typically is .35 to .40 for most soils	[-]	0.35
Input	Proportion of porosity filled with release fluid [0,1]	[-]	0.15
Output	volume of fluid	[feet^3]	**55.9**
		[gal]	**418.3**
		Barrels	10.0

Appendix B

OSE Well Log

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 00854 POD1	1	1	2	33	21S	33E	633879	3590223

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE

Driller Name: GLENN, CLARK A."CORKY" (LD)

Drill Start Date: 06/22/1996 **Drill Finish Date:** 06/22/1996 **Plug Date:**

Log File Date: 07/11/1996 **PCW Rcv Date:** 10/17/2013 **Source:** Shallow

Pump Type: SUBMER **Pipe Discharge Size:** 2.875 **Estimated Yield:** 100 GPM

Casing Size: 6.63 **Depth Well:** 950 feet **Depth Water:** 600 feet

Water Bearing Stratifications:

Top	Bottom	Description
755	805	Sandstone/Gravel/Conglomerate
860	890	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
760	950

Meter Number: 8514 **Meter Make:** BLANCETT

Meter Serial Number: 040 711 711 **Meter Multiplier:** 100.0000

Number of Dials: 8 **Meter Type:** Diversion

Unit of Measure: Barrels 42 gal. **Return Flow Percent:**

Usage Multiplier: **Reading Frequency:** Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
03/15/2004	2004	121	A	jw		0	
03/29/2004	2004	69871	A	jw		0	
05/17/2004	2004	8758	A	jw		2.651	
06/11/2004	2004	79641	A	jw		2.998	
01/27/2012	2012	18062553	A	RPT	Initial reading	0	
03/01/2012	2012	19039807	A	RPT		2.999	
05/29/2013	2013	179696	A	RPT	initial reading	0	
10/07/2013	2013	460774	A	RPT	Qtr IV 2013	36.229	
11/11/2013	2013	540326	A	RPT		10.254	
01/01/2014	2013	614283	A	RPT		9.533	
10/01/2014	2014	1122654	A	RPT		65.526	
01/01/2015	2014	1212343	A	RPT		11.560	
03/31/2015	2015	1307063	A	RPT		12.209	
06/27/2015	2015	1369556	A	RPT		8.055	

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
09/30/2015	2015	1371471	A	RPT		0.247	
10/22/2015	2015	1400502	A	RPT		3.742	
11/30/2015	2015	1400502	A	RPT		0	
04/28/2016	2016	1464116	A	RPT	"JD33 Well"	8.199	
06/01/2016	2016	1464116	A	RPT		0	
07/27/2016	2016	1496980	A	RPT	JD33 Well	4.236	
09/01/2016	2016	1510835	A	RPT	JD 33 Well	1.786	
09/30/2016	2016	1517146	A	RPT		0.813	
10/31/2016	2016	1531178	A	RPT	JD 33 well	1.809	
11/29/2016	2016	1553285	A	RPT	JD33 Well	2.849	
12/31/2016	2016	1572799	A	ap		251.522	
02/01/2017	2017	1583100	A	ap		132.773	
03/01/2017	2017	1583100	A	ap		0	
04/01/2017	2017	1586113	A	ap		38.836	
05/01/2017	2017	1586113	A	ap		0	
05/31/2017	2017	1586113	A	ap		0	
07/31/2017	2017	1605663	A	ap		251.986	
10/31/2017	2017	1663578	A	ap		746.485	
11/30/2017	2017	1699246	A	ap		459.737	
12/30/2017	2017	1730759	A	ap		406.181	
01/30/2018	2018	1749008	A	ap		235.217	
02/28/2018	2018	1776933	A	ap		359.934	
03/30/2018	2018	1776933	A	ap		0	
04/30/2018	2018	1795210	A	ap		235.578	
06/29/2018	2018	1865977	A	ap		912.139	
07/31/2018	2018	1894970	A	ap		373.700	
08/30/2018	2018	1920958	A	ap		334.968	
09/30/2018	2018	1937637	A	ap		214.981	
11/30/2018	2018	1968052	A	ap		392.029	
03/01/2019	2019	2022087	A	ap		696.475	
04/01/2019	2019	2036608	A	ap		187.166	
05/01/2019	2019	2052550	A	ap		205.482	
05/31/2019	2019	2068637	A	ap		207.351	
06/30/2019	2019	2078429	A	ap		126.212	
10/31/2019	2019	2176343	A	ap		1262.046	
06/01/2020	2020	3449	A	RPT	CHANGE/REPLACED BATTERY	0	

**YTD Meter Amounts:	Year	Amount
	2004	5.649
	2012	2.999
	2013	56.016
	2014	77.086

**YTD Meter Amounts:	Year	Amount
	2015	24.253
	2016	271.214
	2017	2035.998
	2018	3058.546
	2019	2684.732
	2020	0

Appendix C

Karst Potential Map

*New Mexico Kart or No Karst - QGIS

Project Edit View Layer Settings Plugins Vector Raster Database Web Mesh Processing Help

Browser

- Favorites
- Spatial Bookmarks
- Project Home
- Home
- C:\
- D:\
- L:\
- Z:\
- GeoPackage
- SpatiaLite
- PostGIS
- MSSQL
- Oracle
- DB2
- WMS/WMTS
- XYZ Tiles
- WCS
- WFS / OGC API - Features
- OWS
- ArcGisMapServer
- ArcGisFeatureServer
- GeoNode

Layers

- Added geom info
- carlsbad_west
- Karst_or_No_Karst
  - High
  - Low
  - Medium
- Bing Satellite

Layer Styling

Bing Satellite

Singleband color data

This renderer doesn't implement a graphical interface.

Layer Rendering

Live update Apply

Layer Styling | Processing Toolbox

Identify Results

Feature	Value
Karst_or_No_Karst	
Potential	Low
(Derived)	
(Actions)	
OBJECTID	20
Area	0
Perimeter	0
Acres	3468786.32825999986
Hectares	1403768.02303999988
Potential	Low
LINK	NULL
GlobalID	{7425CFA0-E688-45D3-A5D6-830984BBDF05}
Shape_STAr	14037680230.39999961853
Shape_STLe	898512.38263899996

Mode Current layer

View Tree Help

Coordinate 630645.2,3590756.1 Scale 1:2480 Magnifier 100% Rotation 0.0 ° Render EPSG:26913

Appendix D

Laboratory Reports

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Location: NM

Lab Order Number: 0F26003

NELAP ACCREDITED TNI LABORATORY

NELAP/TCEQ # T104704516-17-8

Report Date: 07/05/20

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-1 @ 0.5'	0F26003-01	Soil	06/25/20 10:30	06-26-2020 09:20
S-1 @ 1'	0F26003-02	Soil	06/25/20 10:35	06-26-2020 09:20
S-2 @ 0.5'	0F26003-03	Soil	06/25/20 10:37	06-26-2020 09:20
S-2 @ 1'	0F26003-04	Soil	06/25/20 10:40	06-26-2020 09:20
S-3 @ 0.5'	0F26003-05	Soil	06/25/20 10:45	06-26-2020 09:20
S-3 @ 1'	0F26003-06	Soil	06/25/20 10:47	06-26-2020 09:20
S-4 @ 0.5'	0F26003-07	Soil	06/25/20 11:05	06-26-2020 09:20
S-4 @ 1'	0F26003-08	Soil	06/25/20 11:10	06-26-2020 09:20
S-5 @ 0.5'	0F26003-09	Soil	06/25/20 11:15	06-26-2020 09:20
S-5 @ 1'	0F26003-10	Soil	06/25/20 11:20	06-26-2020 09:20
S-6 @ 0.5'	0F26003-11	Soil	06/25/20 11:25	06-26-2020 09:20
S-6 @ 1'	0F26003-12	Soil	06/25/20 11:30	06-26-2020 09:20
S-7 @ 0.5'	0F26003-13	Soil	06/25/20 11:35	06-26-2020 09:20
S-7 @ 1'	0F26003-14	Soil	06/25/20 11:40	06-26-2020 09:20
S-8 @ 0.5'	0F26003-15	Soil	06/25/20 11:50	06-26-2020 09:20
S-8 @ 1'	0F26003-16	Soil	06/25/20 11:50	06-26-2020 09:20

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-1 @ 0.5'

0F26003-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*97.4 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.1 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**9720**	11.0	mg/kg dry	10	P0F2608	06/26/20	06/26/20	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P0F2606	06/26/20	06/26/20	TPH 8015M	
>C12-C28	**38.9**	27.5	mg/kg dry	1	P0F2606	06/26/20	06/26/20	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P0F2606	06/26/20	06/26/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*94.9 %*	*70-130*		*P0F2606*	*06/26/20*	*06/26/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*101 %*	*70-130*		*P0F2606*	*06/26/20*	*06/26/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**38.9**	27.5	mg/kg dry	1	[CALC]	06/26/20	06/26/20	calc	

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

S-1 @ 1'

0F26003-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*107 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*99.2 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**9530**	10.9	mg/kg dry	10	P0F2608	06/26/20	06/26/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0F2606	06/26/20	06/26/20	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P0F2606	06/26/20	06/26/20	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0F2606	06/26/20	06/26/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*95.7 %*	*70-130*		*P0F2606*	*06/26/20*	*06/26/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*103 %*	*70-130*		*P0F2606*	*06/26/20*	*06/26/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	06/26/20	06/26/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-2 @ 0.5'

0F26003-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00112	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00112	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00112	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00225	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00112	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*98.2 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*95.3 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**13400**	28.1	mg/kg dry	25	P0F2608	06/26/20	06/26/20	EPA 300.0	
% Moisture	**11.0**	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.1	mg/kg dry	1	P0F2606	06/26/20	06/26/20	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P0F2606	06/26/20	06/26/20	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P0F2606	06/26/20	06/26/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.3 %*	*70-130*		*P0F2606*	*06/26/20*	*06/26/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*104 %*	*70-130*		*P0F2606*	*06/26/20*	*06/26/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	06/26/20	06/26/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-2 @ 1'

0F26003-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*92.0 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.2 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**8020**	10.9	mg/kg dry	10	P0F2608	06/26/20	06/27/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**45.1**	27.2	mg/kg dry	1	P0F2606	06/26/20	06/29/20	TPH 8015M	
>C12-C28	**60.8**	27.2	mg/kg dry	1	P0F2606	06/26/20	06/29/20	TPH 8015M	
>C28-C35	**71.7**	27.2	mg/kg dry	1	P0F2606	06/26/20	06/29/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*98.4 %*	*70-130*		*P0F2606*	*06/26/20*	*06/29/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*100 %*	*70-130*		*P0F2606*	*06/26/20*	*06/29/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**178**	27.2	mg/kg dry	1	[CALC]	06/26/20	06/29/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-3 @ 0.5'

0F26003-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*98.2 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.9 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**7500**	10.9	mg/kg dry	10	P0F2608	06/26/20	06/27/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**50.8**	27.2	mg/kg dry	1	P0F2606	06/26/20	06/29/20	TPH 8015M	
>C12-C28	**34.8**	27.2	mg/kg dry	1	P0F2606	06/26/20	06/29/20	TPH 8015M	
>C28-C35	**56.7**	27.2	mg/kg dry	1	P0F2606	06/26/20	06/29/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.6 %*	*70-130*		*P0F2606*	*06/26/20*	*06/29/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*98.1 %*	*70-130*		*P0F2606*	*06/26/20*	*06/29/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**142**	27.2	mg/kg dry	1	[CALC]	06/26/20	06/29/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-3 @ 1'

0F26003-06 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	07/01/20	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	07/01/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	07/01/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0F2905	06/29/20	07/01/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0F2905	06/29/20	07/01/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.5 %*	*75-125*		*P0F2905*	*06/29/20*	*07/01/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*95.8 %*	*75-125*		*P0F2905*	*06/29/20*	*07/01/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**7720**	10.9	mg/kg dry	10	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*101 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*107 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-4 @ 0.5'

0F26003-07 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.6 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*93.4 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**7960**	10.8	mg/kg dry	10	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*103 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*107 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-4 @ 1'

0F26003-08 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*94.0 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.8 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**9160**	10.8	mg/kg dry	10	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*102 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*105 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-5 @ 0.5'

0F26003-09 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00100	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00100	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00100	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*106 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*101 %*	*75-125*		*P0F2905*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**63.5**	1.00	mg/kg dry	1	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.4 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*99.1 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.0	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-5 @ 1'

0F26003-10 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*90.1 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.1 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**10.5**	1.00	mg/kg dry	1	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.0 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*102 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.0	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-6 @ 0.5'

0F26003-11 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.1 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**47.7**	1.00	mg/kg dry	1	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.2 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*101 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.0	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-6 @ 1'

0F26003-12 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*89.3 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.0 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**46.7**	1.00	mg/kg dry	1	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.6 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*102 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.0	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-7 @ 0.5'

0F26003-13 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.6 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.1 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**17.7**	1.00	mg/kg dry	1	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*92.0 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.9 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.0	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-7 @ 1'

0F26003-14 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.9 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*89.2 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**15.5**	1.00	mg/kg dry	1	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.8 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*101 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.0	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-8 @ 0.5'

0F26003-15 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.3 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.1 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**63.9**	1.02	mg/kg dry	1	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.0 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*106 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-8 @ 1'

0F26003-16 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Toluene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	ND	0.00100	mg/kg dry	1	P0F2907	06/29/20	06/30/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.1 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*92.1 %*	*75-125*		*P0F2907*	*06/29/20*	*06/30/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**29.5**	1.00	mg/kg dry	1	P0F2901	06/29/20	06/29/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F2701	06/27/20	06/29/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C12-C28	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
>C28-C35	ND	25.0	mg/kg dry	1	P0F2606	06/26/20	06/27/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*98.6 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*102 %*	*70-130*		*P0F2606*	*06/26/20*	*06/27/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.0	mg/kg dry	1	[CALC]	06/26/20	06/27/20	calc	

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Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2905 - General Preparation (GC)										
Blank (P0F2905-BLK1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.107*		"	*0.120*		*89.3*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.112*		"	*0.120*		*93.6*	*75-125*			
LCS (P0F2905-BS1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.0984	0.00100	mg/kg wet	0.100		98.4	70-130			
Toluene	0.0950	0.00100	"	0.100		95.0	70-130			
Ethylbenzene	0.103	0.00100	"	0.100		103	70-130			
Xylene (p/m)	0.197	0.00200	"	0.200		98.7	70-130			
Xylene (o)	0.103	0.00100	"	0.100		103	70-130			
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*95.7*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.108*		"	*0.120*		*89.8*	*75-125*			
LCS Dup (P0F2905-BSD1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.103	0.00100	mg/kg wet	0.100		103	70-130	4.53	20	
Toluene	0.102	0.00100	"	0.100		102	70-130	7.31	20	
Ethylbenzene	0.104	0.00100	"	0.100		104	70-130	0.543	20	
Xylene (p/m)	0.207	0.00200	"	0.200		104	70-130	4.85	20	
Xylene (o)	0.109	0.00100	"	0.100		109	70-130	5.50	20	
Surrogate: 1,4-Difluorobenzene	*0.116*		"	*0.120*		*96.4*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.104*		"	*0.120*		*86.4*	*75-125*			
Calibration Blank (P0F2905-CCB1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.00		mg/kg wet							
Toluene	0.420		"							
Ethylbenzene	0.330		"							
Xylene (p/m)	0.530		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.104*		"	*0.120*		*87.0*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.112*		"	*0.120*		*93.7*	*75-125*			

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2905 - General Preparation (GC)										
Calibration Blank (P0F2905-CCB2)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.00		mg/kg wet							
Toluene	0.770		"							
Ethylbenzene	0.620		"							
Xylene (p/m)	1.12		"							
Xylene (o)	0.470		"							
Surrogate: 4-Bromofluorobenzene	*0.110*		*"*	*0.120*		*92.0*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.113*		*"*	*0.120*		*93.8*	*75-125*			
Calibration Blank (P0F2905-CCB3)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.00		mg/kg wet							
Toluene	0.410		"							
Ethylbenzene	0.400		"							
Xylene (p/m)	1.03		"							
Xylene (o)	0.390		"							
Surrogate: 4-Bromofluorobenzene	*0.110*		*"*	*0.120*		*91.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*94.6*	*75-125*			
Calibration Check (P0F2905-CCV1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.110	0.00100	mg/kg wet	0.100		110	80-120			
Toluene	0.104	0.00100	"	0.100		104	80-120			
Ethylbenzene	0.109	0.00100	"	0.100		109	80-120			
Xylene (p/m)	0.210	0.00200	"	0.200		105	80-120			
Xylene (o)	0.113	0.00100	"	0.100		113	80-120			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*96.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.104*		*"*	*0.120*		*87.0*	*75-125*			
Calibration Check (P0F2905-CCV2)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.104	0.00100	mg/kg wet	0.100		104	80-120			
Toluene	0.101	0.00100	"	0.100		101	80-120			
Ethylbenzene	0.104	0.00100	"	0.100		104	80-120			
Xylene (p/m)	0.197	0.00200	"	0.200		98.5	80-120			
Xylene (o)	0.109	0.00100	"	0.100		109	80-120			
Surrogate: 4-Bromofluorobenzene	*0.109*		*"*	*0.120*		*90.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.8*	*75-125*			

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P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2905 - General Preparation (GC)										
Calibration Check (P0F2905-CCV3)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.101	0.00100	mg/kg wet	0.100		101	80-120			
Toluene	0.0970	0.00100	"	0.100		97.0	80-120			
Ethylbenzene	0.0973	0.00100	"	0.100		97.3	80-120			
Xylene (p/m)	0.185	0.00200	"	0.200		92.6	80-120			
Xylene (o)	0.104	0.00100	"	0.100		104	80-120			
Surrogate: 4-Bromofluorobenzene	*0.109*		*"*	*0.120*		*90.5*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.5*	*75-125*			
Matrix Spike (P0F2905-MS1)		**Source: 0F26003-01**		Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.0778	0.00110	mg/kg dry	0.110	ND	70.8	80-120			QM-07
Toluene	0.0679	0.00110	"	0.110	ND	61.8	80-120			QM-07
Ethylbenzene	0.0606	0.00110	"	0.110	ND	55.2	80-120			QM-07
Xylene (p/m)	0.158	0.00220	"	0.220	ND	71.9	80-120			QM-07
Xylene (o)	0.0859	0.00110	"	0.110	ND	78.2	80-120			QM-07
Surrogate: 1,4-Difluorobenzene	*0.127*		*"*	*0.132*		*96.4*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.120*		*"*	*0.132*		*91.0*	*75-125*			
Matrix Spike Dup (P0F2905-MSD1)		**Source: 0F26003-01**		Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.0898	0.00110	mg/kg dry	0.110	ND	81.7	80-120	14.2	20	
Toluene	0.0809	0.00110	"	0.110	ND	73.6	80-120	17.4	20	QM-07
Ethylbenzene	0.0733	0.00110	"	0.110	ND	66.7	80-120	19.0	20	QM-07
Xylene (p/m)	0.179	0.00220	"	0.220	ND	81.4	80-120	12.4	20	
Xylene (o)	0.0977	0.00110	"	0.110	ND	88.9	80-120	12.8	20	
Surrogate: 1,4-Difluorobenzene	*0.128*		*"*	*0.132*		*97.1*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.120*		*"*	*0.132*		*91.0*	*75-125*			
Batch P0F2907 - General Preparation (GC)										
Blank (P0F2907-BLK1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.108*		*"*	*0.120*		*90.2*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*95.0*	*75-125*			

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Project: Dagger Lake Pit
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Project Manager: Mark Larson

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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2907 - General Preparation (GC)										
LCS (P0F2907-BS1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.0999	0.00100	mg/kg wet	0.100		99.9	70-130			
Toluene	0.0957	0.00100	"	0.100		95.7	70-130			
Ethylbenzene	0.101	0.00100	"	0.100		101	70-130			
Xylene (p/m)	0.187	0.00200	"	0.200		93.3	70-130			
Xylene (o)	0.101	0.00100	"	0.100		101	70-130			
Surrogate: 1,4-Difluorobenzene	*0.116*		"	*0.120*		*96.7*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.105*		"	*0.120*		*87.8*	*75-125*			
LCS Dup (P0F2907-BSD1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.0974	0.00100	mg/kg wet	0.100		97.4	70-130	2.57	20	
Toluene	0.0946	0.00100	"	0.100		94.6	70-130	1.12	20	
Ethylbenzene	0.103	0.00100	"	0.100		103	70-130	1.85	20	
Xylene (p/m)	0.188	0.00200	"	0.200		94.2	70-130	1.00	20	
Xylene (o)	0.102	0.00100	"	0.100		102	70-130	0.895	20	
Surrogate: 4-Bromofluorobenzene	*0.110*		"	*0.120*		*91.3*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.116*		"	*0.120*		*96.4*	*75-125*			
Calibration Blank (P0F2907-CCB1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.00		mg/kg wet							
Toluene	0.410		"							
Ethylbenzene	0.400		"							
Xylene (p/m)	1.03		"							
Xylene (o)	0.390		"							
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*94.6*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.110*		"	*0.120*		*91.8*	*75-125*			
Calibration Blank (P0F2907-CCB2)				Prepared: 06/29/20 Analyzed: 07/01/20						
Benzene	0.00		mg/kg wet							
Toluene	0.380		"							
Ethylbenzene	0.360		"							
Xylene (p/m)	0.710		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.112*		"	*0.120*		*93.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.109*		"	*0.120*		*90.8*	*75-125*			

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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2907 - General Preparation (GC)										
Calibration Blank (P0F2907-CCB3)				Prepared: 06/29/20 Analyzed: 07/01/20						
Benzene	0.00		mg/kg wet							
Toluene	0.540		"							
Ethylbenzene	0.340		"							
Xylene (p/m)	1.15		"							
Xylene (o)	0.340		"							
Surrogate: 4-Bromofluorobenzene	*0.113*		*"*	*0.120*		*93.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.111*		*"*	*0.120*		*92.3*	*75-125*			
Calibration Check (P0F2907-CCV1)				Prepared: 06/29/20 Analyzed: 06/30/20						
Benzene	0.101	0.00100	mg/kg wet	0.100		101	80-120			
Toluene	0.0970	0.00100	"	0.100		97.0	80-120			
Ethylbenzene	0.0973	0.00100	"	0.100		97.3	80-120			
Xylene (p/m)	0.185	0.00200	"	0.200		92.6	80-120			
Xylene (o)	0.104	0.00100	"	0.100		104	80-120			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.5*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.109*		*"*	*0.120*		*90.5*	*75-125*			
Calibration Check (P0F2907-CCV2)				Prepared: 06/29/20 Analyzed: 07/01/20						
Benzene	0.102	0.00100	mg/kg wet	0.100		102	80-120			
Toluene	0.0966	0.00100	"	0.100		96.6	80-120			
Ethylbenzene	0.0972	0.00100	"	0.100		97.2	80-120			
Xylene (p/m)	0.187	0.00200	"	0.200		93.5	80-120			
Xylene (o)	0.105	0.00100	"	0.100		105	80-120			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.5*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.111*		*"*	*0.120*		*92.1*	*75-125*			
Calibration Check (P0F2907-CCV3)				Prepared: 06/29/20 Analyzed: 07/01/20						
Benzene	0.105	0.00100	mg/kg wet	0.100		105	80-120			
Toluene	0.108	0.00100	"	0.100		108	80-120			
Ethylbenzene	0.107	0.00100	"	0.100		107	80-120			
Xylene (p/m)	0.212	0.00200	"	0.200		106	80-120			
Xylene (o)	0.104	0.00100	"	0.100		104	80-120			
Surrogate: 4-Bromofluorobenzene	*0.117*		*"*	*0.120*		*97.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.112*		*"*	*0.120*		*93.2*	*75-125*			

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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2907 - General Preparation (GC)										
Matrix Spike (P0F2907-MS1)	**Source: 0F26003-10**			Prepared: 06/29/20 Analyzed: 07/01/20						
Benzene	0.0850	0.00100	mg/kg dry	0.100	ND	85.0	80-120			
Toluene	0.0759	0.00100	"	0.100	ND	75.9	80-120			QM-07
Ethylbenzene	0.0379	0.00100	"	0.100	ND	37.9	80-120			QM-07
Xylene (p/m)	0.0868	0.00200	"	0.200	ND	43.4	80-120			QM-07
Xylene (o)	0.0419	0.00100	"	0.100	ND	41.9	80-120			QM-07
Surrogate: 4-Bromofluorobenzene	*0.0781*		*"*	*0.120*		*65.1*	*75-125*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.9*	*75-125*			
Matrix Spike Dup (P0F2907-MSD1)	**Source: 0F26003-10**			Prepared: 06/29/20 Analyzed: 07/01/20						
Benzene	0.106	0.00100	mg/kg dry	0.100	ND	106	80-120	21.5	20	QM-07
Toluene	0.0972	0.00100	"	0.100	ND	97.2	80-120	24.6	20	QM-07
Ethylbenzene	0.0815	0.00100	"	0.100	ND	81.5	80-120	73.1	20	QM-07
Xylene (p/m)	0.128	0.00200	"	0.200	ND	63.9	80-120	38.2	20	QM-07
Xylene (o)	0.0669	0.00100	"	0.100	ND	66.9	80-120	46.0	20	QM-07
Surrogate: 4-Bromofluorobenzene	*0.0942*		*"*	*0.120*		*78.5*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.123*		*"*	*0.120*		*103*	*75-125*			

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2608 - * DEFAULT PREP *** **										
Blank (P0F2608-BLK1)				Prepared & Analyzed: 06/26/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0F2608-BS1)				Prepared & Analyzed: 06/26/20						
Chloride	391	1.00	mg/kg wet	400		97.8	80-120			
LCS Dup (P0F2608-BSD1)				Prepared & Analyzed: 06/26/20						
Chloride	391	1.00	mg/kg wet	400		97.7	80-120	0.118	20	
Calibration Blank (P0F2608-CCB2)				Prepared & Analyzed: 06/26/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0F2608-CCV1)				Prepared & Analyzed: 06/26/20						
Chloride	19.0		mg/kg	20.0		95.2	0-200			
Calibration Check (P0F2608-CCV2)				Prepared & Analyzed: 06/26/20						
Chloride	19.2		mg/kg	20.0		95.8	0-200			
Calibration Check (P0F2608-CCV3)				Prepared: 06/26/20 Analyzed: 06/27/20						
Chloride	21.0		mg/kg	20.0		105	0-200			
Matrix Spike (P0F2608-MS1)		**Source: 0F24014-02**		Prepared & Analyzed: 06/26/20						
Chloride	14300	27.2	mg/kg dry	2720	11100	117	80-120			
Matrix Spike (P0F2608-MS2)		**Source: 0F25004-10**		Prepared & Analyzed: 06/26/20						
Chloride	551	1.12	mg/kg dry	562	36.5	91.6	80-120			
Matrix Spike Dup (P0F2608-MSD1)		**Source: 0F24014-02**		Prepared & Analyzed: 06/26/20						
Chloride	13900	27.2	mg/kg dry	2720	11100	102	80-120	3.06	20	

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2608 - * DEFAULT PREP *** **										
Matrix Spike Dup (P0F2608-MSD2)	**Source: 0F25004-10**			Prepared & Analyzed: 06/26/20						
Chloride	559	1.12	mg/kg dry	562	36.5	93.0	80-120	1.34	20	
Batch P0F2701 - * DEFAULT PREP *** **										
Blank (P0F2701-BLK1)				Prepared: 06/27/20 Analyzed: 06/29/20						
% Moisture	ND	0.1	%							
Duplicate (P0F2701-DUP1)	**Source: 0F26003-14**			Prepared: 06/27/20 Analyzed: 06/29/20						
% Moisture	ND	0.1	%		ND				20	
Duplicate (P0F2701-DUP2)	**Source: 0F26010-11**			Prepared: 06/27/20 Analyzed: 06/29/20						
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P0F2701-DUP3)	**Source: 0F26010-38**			Prepared: 06/27/20 Analyzed: 06/29/20						
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P0F2701-DUP4)	**Source: 0F26015-11**			Prepared: 06/27/20 Analyzed: 06/29/20						
% Moisture	ND	0.1	%		ND				20	
Batch P0F2901 - * DEFAULT PREP *** **										
LCS (P0F2901-BS1)				Prepared & Analyzed: 06/29/20						
Chloride	408	1.00	mg/kg wet	400		102	80-120			
LCS Dup (P0F2901-BSD1)				Prepared & Analyzed: 06/29/20						
Chloride	407	1.00	mg/kg wet	400		102	80-120	0.260	20	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2901 - * DEFAULT PREP *** **										
Calibration Blank (P0F2901-CCB2)				Prepared & Analyzed: 06/29/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0F2901-CCV1)				Prepared & Analyzed: 06/29/20						
Chloride	19.7		mg/kg	20.0		98.6	0-200			
Calibration Check (P0F2901-CCV2)				Prepared & Analyzed: 06/29/20						
Chloride	19.9		mg/kg	20.0		99.3	0-200			
Matrix Spike (P0F2901-MS1)		**Source: 0F26003-06**		Prepared & Analyzed: 06/29/20						
Chloride	8900	10.9	mg/kg dry	1090	7720	108	80-120			
Matrix Spike (P0F2901-MS2)		**Source: 0F26003-16**		Prepared & Analyzed: 06/29/20						
Chloride	516	1.00	mg/kg dry		29.5		80-120			QM-05
Matrix Spike Dup (P0F2901-MSD1)		**Source: 0F26003-06**		Prepared & Analyzed: 06/29/20						
Chloride	8990	10.9	mg/kg dry	1090	7720	117	80-120	1.07	20	
Matrix Spike Dup (P0F2901-MSD2)		**Source: 0F26003-16**		Prepared & Analyzed: 06/29/20						
Chloride	485	1.00	mg/kg dry		29.5		80-120	6.12	20	QM-05

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2606 - TX 1005										
Blank (P0F2606-BLK1)				Prepared & Analyzed: 06/26/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*125*		*"*	*100*		*125*	*70-130*			
Surrogate: o-Terphenyl	*61.6*		*"*	*50.0*		*123*	*70-130*			
LCS (P0F2606-BS1)				Prepared & Analyzed: 06/26/20						
C6-C12	946	25.0	mg/kg wet	1000		94.6	75-125			
>C12-C28	1100	25.0	"	1000		110	75-125			
Surrogate: 1-Chlorooctane	*113*		*"*	*100*		*113*	*70-130*			
Surrogate: o-Terphenyl	*55.9*		*"*	*50.0*		*112*	*70-130*			
LCS Dup (P0F2606-BSD1)				Prepared & Analyzed: 06/26/20						
C6-C12	998	25.0	mg/kg wet	1000		99.8	75-125	5.30	20	
>C12-C28	1140	25.0	"	1000		114	75-125	3.70	20	
Surrogate: 1-Chlorooctane	*116*		*"*	*100*		*116*	*70-130*			
Surrogate: o-Terphenyl	*57.0*		*"*	*50.0*		*114*	*70-130*			
Calibration Check (P0F2606-CCV1)				Prepared & Analyzed: 06/26/20						
C6-C12	480	25.0	mg/kg wet	500		96.0	85-115			
>C12-C28	492	25.0	"	500		98.3	85-115			
Surrogate: 1-Chlorooctane	*118*		*"*	*100*		*118*	*70-130*			
Surrogate: o-Terphenyl	*57.7*		*"*	*50.0*		*115*	*70-130*			
Calibration Check (P0F2606-CCV2)				Prepared: 06/26/20 Analyzed: 06/27/20						
C6-C12	480	25.0	mg/kg wet	500		95.9	85-115			
>C12-C28	572	25.0	"	500		114	85-115			
Surrogate: 1-Chlorooctane	*121*		*"*	*100*		*121*	*70-130*			
Surrogate: o-Terphenyl	*59.8*		*"*	*50.0*		*120*	*70-130*			

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2606 - TX 1005										
Matrix Spike (P0F2606-MS1)	**Source: 0F26003-16**			Prepared: 06/26/20 Analyzed: 06/27/20						
C6-C12	1080	25.0	mg/kg dry	1000	10.9	107	75-125			
>C12-C28	1150	25.0	"	1000	ND	115	75-125			
Surrogate: 1-Chlorooctane	*128*		*"*	*100*		*128*	*70-130*			
Surrogate: o-Terphenyl	*63.7*		*"*	*50.0*		*127*	*70-130*			
Matrix Spike Dup (P0F2606-MSD1)	**Source: 0F26003-16**			Prepared: 06/26/20 Analyzed: 06/27/20						
C6-C12	1060	25.0	mg/kg dry	1000	10.9	105	75-125	2.25	20	
>C12-C28	1170	25.0	"	1000	ND	117	75-125	1.86	20	
Surrogate: 1-Chlorooctane	*124*		*"*	*100*		*124*	*70-130*			
Surrogate: o-Terphenyl	*61.7*		*"*	*50.0*		*123*	*70-130*			

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
ROI	Received on Ice
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 7/5/2020

Brent Barron, Laboratory Director/Technical Director

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

Nº1180

CHAIN-OF-CUSTOD

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

DATE: 6/25/20 PAGE 1 OF 2

PO#: LAB WORK ORDER#: 0F26003

PROJECT LOCATION OR NAME: DAGGER LAKE PIT

LAI PROJECT #: 20-0100-05 COLLECTOR: DS

Data Reported to:

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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

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

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ | OIL - MOD 8015 ☒ | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - 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 ☐

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	BTEX ☒ MTBE ☐	TRPH 418.1 ☐	TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☒	DIESEL - MOD 8015 ☒	OIL - MOD 8015 ☒	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - 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 ☐	FIELD NOTES
S-1 (0.5)	1	6/25/20	1030	S	1				X		X			X	X	X												X		
S-1 (1)	2		1035																											
S-2 (0.5)	3		1037																											
S-2 (1)	4		1040																											
S-3 (0.5)	5		1045																											
S-3 (1)	6		1047																											
S-4 (0.5)	7		1105																											
S-4 (1)	8		1110																											
S-5 (0.5)	9		1115																											
S-5 (1)	10		1120																											
S-6 (0.5)	11		1125																											
S-6 (1)	12		1130																											
S-7 (0.5)	13		1135																											
S-7 (1)	14		1140																											
S-8 (0.5)	15		1150																											
TOTAL	15																													

RELINQUISHED BY:(Signature) Brenda Bellino DATE/TIME 6/26 9:20 RECEIVED BY: (Signature) Tina Bledsoe

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

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

LABORATORY: PBEL

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

LABORATORY USE ONLY:
RECEIVING TEMP: -2-1-2 CF 1.2 THERM#:
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

№ 1181

CHAIN-OF-CUSTODY

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

DATE: 6/25/20 PAGE 2 OF 2

PO#: _____ LAB WORK ORDER#: OF26003

PROJECT LOCATION OR NAME: DAGGER LAKE PIT

LAI PROJECT #: 20-0100-05 COLLECTOR: DS

Data Reported to:

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☒ MTBE ☐	TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☒	DIESEL - MOD 8015 ☒	OIL - MOD 8015 ☒	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - 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 ☐	FIELD NOTES
S-8 (1')	16	6/25/20	1150	S	1				X		X		X	X	X														X	

TOTAL 1

RELINQUISHED BY:(Signature) Brenda Ballio DATE/TIME 6/26/20 9:20 RECEIVED BY:(Signature) Trina Bledsoe

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

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

LABORATORY: PBEL

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

LABORATORY USE ONLY:
RECEIVING TEMP: -2-1.2 THERM#: CF+1 12
CUSTODY SEALS ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Location: NM

Lab Order Number: 0H31003

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 09/03/20

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-1 @ 1'	0H31003-01	Soil	08/28/20 10:37	08-31-2020 10:10
S-1 @ 3'	0H31003-02	Soil	08/28/20 10:40	08-31-2020 10:10
S-1 @ 5'	0H31003-03	Soil	08/28/20 10:42	08-31-2020 10:10
S-2 @ 1'	0H31003-05	Soil	08/28/20 11:15	08-31-2020 10:10
S-2 @ 3'	0H31003-06	Soil	08/28/20 11:17	08-31-2020 10:10
S-3 @ 1'	0H31003-09	Soil	08/28/20 12:10	08-31-2020 10:10
S-4 @ 1'	0H31003-13	Soil	08/28/20 12:40	08-31-2020 10:10
S-4 @ 3'	0H31003-14	Soil	08/28/20 12:42	08-31-2020 10:10
S-9 @ 1'	0H31003-17	Soil	08/28/20 11:00	08-31-2020 10:10
S-10 @ 1'	0H31003-21	Soil	08/28/20 11:30	08-31-2020 10:10
S-11 @ 1'	0H31003-25	Soil	08/28/20 12:20	08-31-2020 10:10
S-12 @ 1'	0H31003-29	Soil	08/28/20 12:55	08-31-2020 10:10

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-1 @ 1'

0H31003-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:22	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:22	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:22	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:22	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:22	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*98.1 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 08:22*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*86.2 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 08:22*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**7970**	10.8	mg/kg dry	10	P0H3108	08/31/20 16:24	08/31/20 18:14	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 16:50	TPH 8015M	
>C12-C28	**43.8**	26.9	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 16:50	TPH 8015M	
>C28-C35	**108**	26.9	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 16:50	TPH 8015M	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 16:50*	*TPH 8015M*	
Surrogate: o-Terphenyl		*110 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 16:50*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**152**	26.9	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 16:50	calc	

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

S-1 @ 3'

0H31003-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:42	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:42	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:42	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:42	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 08:42	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*88.9 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 08:42*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*87.9 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 08:42*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**702**	1.08	mg/kg dry	1	P0H3108	08/31/20 16:24	08/31/20 19:01	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 17:14	TPH 8015M	
>C12-C28	**50.6**	26.9	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 17:14	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 17:14	TPH 8015M	
Surrogate: 1-Chlorooctane		*112 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 17:14*	*TPH 8015M*	
Surrogate: o-Terphenyl		*115 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 17:14*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**50.6**	26.9	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 17:14	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-1 @ 5'

0H31003-03 (Soil)

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	**50.1**	1.04	mg/kg dry	1	P0H3108	08/31/20 16:24	08/31/20 19:16	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-2 @ 1'

0H31003-05 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:02	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:02	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:02	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:02	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:02	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*86.9 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 09:02*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*91.7 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 09:02*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**7250**	10.8	mg/kg dry	10	P0H3108	08/31/20 16:24	09/01/20 08:40	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 17:37	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 17:37	TPH 8015M	
>C28-C35	**91.5**	26.9	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 17:37	TPH 8015M	
Surrogate: 1-Chlorooctane		*119 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 17:37*	*TPH 8015M*	
Surrogate: o-Terphenyl		*124 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 17:37*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**91.5**	26.9	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 17:37	calc	

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

S-2 @ 3'

0H31003-06 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00111	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:23	EPA 8021B	
Toluene	ND	0.00111	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:23	EPA 8021B	
Ethylbenzene	ND	0.00111	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:23	EPA 8021B	
Xylene (p/m)	ND	0.00222	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:23	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:23	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*86.8 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 09:23*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*89.9 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 09:23*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**364**	1.11	mg/kg dry	1	P0H3108	08/31/20 16:24	08/31/20 20:03	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.8	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 18:00	TPH 8015M	
>C12-C28	**31.6**	27.8	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 18:00	TPH 8015M	
>C28-C35	**50.9**	27.8	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 18:00	TPH 8015M	
Surrogate: 1-Chlorooctane		*120 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 18:00*	*TPH 8015M*	
Surrogate: o-Terphenyl		*125 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 18:00*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**82.6**	27.8	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 18:00	calc	

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

S-3 @ 1'

0H31003-09 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:43	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:43	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:43	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:43	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 09:43	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*86.4 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 09:43*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 09:43*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**577**	1.05	mg/kg dry	1	P0H3108	08/31/20 16:24	08/31/20 20:49	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 18:24	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 18:24	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 18:24	TPH 8015M	
Surrogate: 1-Chlorooctane		*130 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 18:24*	*TPH 8015M*	
Surrogate: o-Terphenyl		*144 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 18:24*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 18:24	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-4 @ 1'

0H31003-13 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 10:24	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 10:24	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 10:24	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 10:24	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P0H3119	08/31/20 15:57	09/01/20 10:24	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*85.0 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 10:24*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*93.7 %*	*75-125*		*P0H3119*	*08/31/20 15:57*	*09/01/20 10:24*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**1630**	1.03	mg/kg dry	1	P0H3108	08/31/20 16:24	08/31/20 22:54	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 19:33	TPH 8015M	
>C12-C28	**78.2**	25.8	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 19:33	TPH 8015M	
>C28-C35	**31.3**	25.8	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 19:33	TPH 8015M	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 19:33*	*TPH 8015M*	
Surrogate: o-Terphenyl		*112 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 19:33*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**109**	25.8	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 19:33	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-4 @ 3'

0H31003-14 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 16:48	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 16:48	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 16:48	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 16:48	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 16:48	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*92.0 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 16:48*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*85.8 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 16:48*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**9.48**	1.04	mg/kg dry	1	P0H3108	08/31/20 16:24	08/31/20 23:09	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 20:43	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 20:43	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 20:43	TPH 8015M	
Surrogate: 1-Chlorooctane		*102 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 20:43*	*TPH 8015M*	
Surrogate: o-Terphenyl		*110 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 20:43*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 20:43	calc	

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

S-9 @ 1'

0H31003-17 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:09	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:09	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:09	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:09	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:09	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*92.5 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 17:09*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*88.1 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 17:09*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**75.8**	1.09	mg/kg dry	1	P0H3108	08/31/20 16:24	08/31/20 23:56	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 21:06	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 21:06	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 21:06	TPH 8015M	
Surrogate: 1-Chlorooctane		*103 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 21:06*	*TPH 8015M*	
Surrogate: o-Terphenyl		*109 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 21:06*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 21:06	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-10 @ 1'

0H31003-21 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:50	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:50	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:50	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:50	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 17:50	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*87.3 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 17:50*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*91.3 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 17:50*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**28.7**	1.03	mg/kg dry	1	P0I0103	09/01/20 09:16	09/01/20 11:09	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 21:52	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 21:52	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 21:52	TPH 8015M	
Surrogate: 1-Chlorooctane		*98.2 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 21:52*	*TPH 8015M*	
Surrogate: o-Terphenyl		*105 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 21:52*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 21:52	calc	

Larson & Associates, Inc.
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Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

S-11 @ 1'

0H31003-25 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 18:31	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 18:31	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 18:31	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 18:31	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 18:31	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*87.1 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 18:31*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.4 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 18:31*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**456**	1.02	mg/kg dry	1	P0I0103	09/01/20 09:16	09/01/20 12:42	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 22:38	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 22:38	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 22:38	TPH 8015M	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 22:38*	*TPH 8015M*	
Surrogate: o-Terphenyl		*115 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 22:38*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 22:38	calc	

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P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

S-12 @ 1'

0H31003-29 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 19:11	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 19:11	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 19:11	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 19:11	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P0I0106	09/01/20 12:23	09/01/20 19:11	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*89.1 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 19:11*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*88.2 %*	*75-125*		*P0I0106*	*09/01/20 12:23*	*09/01/20 19:11*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**36.7**	1.02	mg/kg dry	1	P0I0103	09/01/20 09:16	09/01/20 13:44	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P0I0105	09/01/20 11:08	09/01/20 11:24	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 23:24	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 23:24	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P0H3113	08/31/20 13:30	08/31/20 23:24	TPH 8015M	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 23:24*	*TPH 8015M*	
Surrogate: o-Terphenyl		*114 %*	*70-130*		*P0H3113*	*08/31/20 13:30*	*08/31/20 23:24*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	08/31/20 13:30	08/31/20 23:24	calc	

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H3119 - General Preparation (GC)										
Blank (P0H3119-BLK1)				Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.105*		*"*	*0.120*		*87.2*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.104*		*"*	*0.120*		*86.3*	*75-125*			
LCS (P0H3119-BS1)				Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	0.105	0.00100	mg/kg wet	0.100		105	70-130			
Toluene	0.0966	0.00100	"	0.100		96.6	70-130			
Ethylbenzene	0.100	0.00100	"	0.100		100	70-130			
Xylene (p/m)	0.202	0.00200	"	0.200		101	70-130			
Xylene (o)	0.103	0.00100	"	0.100		103	70-130			
Surrogate: 4-Bromofluorobenzene	*0.109*		*"*	*0.120*		*90.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.106*		*"*	*0.120*		*88.0*	*75-125*			
LCS Dup (P0H3119-BSD1)				Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	0.0923	0.00100	mg/kg wet	0.100		92.3	70-130	12.5	20	
Toluene	0.0894	0.00100	"	0.100		89.4	70-130	7.80	20	
Ethylbenzene	0.0948	0.00100	"	0.100		94.8	70-130	5.35	20	
Xylene (p/m)	0.182	0.00200	"	0.200		91.2	70-130	10.3	20	
Xylene (o)	0.0920	0.00100	"	0.100		92.0	70-130	11.2	20	
Surrogate: 4-Bromofluorobenzene	*0.106*		*"*	*0.120*		*88.2*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.108*		*"*	*0.120*		*90.1*	*75-125*			
Calibration Blank (P0H3119-CCB1)				Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	0.00		mg/kg wet							
Toluene	0.700		"							
Ethylbenzene	0.620		"							
Xylene (p/m)	1.34		"							
Xylene (o)	0.470		"							
Surrogate: 1,4-Difluorobenzene	*0.101*		*"*	*0.120*		*84.5*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.107*		*"*	*0.120*		*89.4*	*75-125*			

Larson & Associates, Inc.
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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H3119 - General Preparation (GC)										
Calibration Blank (P0H3119-CCB2)				Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	0.00		mg/kg wet							
Toluene	0.880		"							
Ethylbenzene	0.380		"							
Xylene (p/m)	0.730		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.104*		*"*	*0.120*		*86.3*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.105*		*"*	*0.120*		*87.7*	*75-125*			
Calibration Check (P0H3119-CCV1)				Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	0.102	0.00100	mg/kg wet	0.100		102	80-120			
Toluene	0.0941	0.00100	"	0.100		94.1	80-120			
Ethylbenzene	0.0954	0.00100	"	0.100		95.4	80-120			
Xylene (p/m)	0.187	0.00200	"	0.200		93.6	80-120			
Xylene (o)	0.100	0.00100	"	0.100		100	80-120			
Surrogate: 4-Bromofluorobenzene	*0.103*		*"*	*0.120*		*85.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.106*		*"*	*0.120*		*88.4*	*75-125*			
Calibration Check (P0H3119-CCV2)				Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	0.0992	0.00100	mg/kg wet	0.100		99.2	80-120			
Toluene	0.0928	0.00100	"	0.100		92.8	80-120			
Ethylbenzene	0.0938	0.00100	"	0.100		93.8	80-120			
Xylene (p/m)	0.183	0.00200	"	0.200		91.6	80-120			
Xylene (o)	0.0955	0.00100	"	0.100		95.5	80-120			
Surrogate: 1,4-Difluorobenzene	*0.107*		*"*	*0.120*		*88.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.103*		*"*	*0.120*		*85.8*	*75-125*			
Calibration Check (P0H3119-CCV3)				Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	0.102	0.00100	mg/kg wet	0.100		102	80-120			
Toluene	0.0914	0.00100	"	0.100		91.4	80-120			
Ethylbenzene	0.0926	0.00100	"	0.100		92.6	80-120			
Xylene (p/m)	0.183	0.00200	"	0.200		91.3	80-120			
Xylene (o)	0.0963	0.00100	"	0.100		96.3	80-120			
Surrogate: 4-Bromofluorobenzene	*0.105*		*"*	*0.120*		*87.2*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.105*		*"*	*0.120*		*87.6*	*75-125*			

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Midland TX, 79710	Project Manager: Mark Larson	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H3119 - General Preparation (GC)										
Matrix Spike (P0H3119-MS1)	**Source: 0H31009-21**			Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	0.0601	0.00104	mg/kg dry	0.104	ND	57.7	80-120			QM-07
Toluene	0.0452	0.00104	"	0.104	0.00165	41.8	80-120			QM-07
Ethylbenzene	0.0440	0.00104	"	0.104	ND	42.2	80-120			QM-07
Xylene (p/m)	0.0734	0.00208	"	0.208	ND	35.2	80-120			QM-07
Xylene (o)	0.0306	0.00104	"	0.104	ND	29.4	80-120			QM-07
Surrogate: 1,4-Difluorobenzene	*0.119*		*"*	*0.125*		*94.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.115*		*"*	*0.125*		*91.9*	*75-125*			
Matrix Spike Dup (P0H3119-MSD1)	**Source: 0H31009-21**			Prepared: 08/31/20 Analyzed: 09/01/20						
Benzene	0.0549	0.00104	mg/kg dry	0.104	ND	52.7	80-120	8.97	20	QM-07
Toluene	0.0401	0.00104	"	0.104	0.00165	36.9	80-120	12.4	20	QM-07
Ethylbenzene	0.0360	0.00104	"	0.104	ND	34.5	80-120	20.0	20	QM-07
Xylene (p/m)	0.0595	0.00208	"	0.208	ND	28.5	80-120	20.9	20	QM-07
Xylene (o)	0.0238	0.00104	"	0.104	ND	22.9	80-120	24.9	20	QM-07
Surrogate: 4-Bromofluorobenzene	*0.111*		*"*	*0.125*		*88.6*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.120*		*"*	*0.125*		*95.7*	*75-125*			
Batch P0I0106 - General Preparation (GC)										
Blank (P0I0106-BLK1)				Prepared & Analyzed: 09/01/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	*0.101*		*"*	*0.120*		*84.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.103*		*"*	*0.120*		*86.0*	*75-125*			

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Project Manager: Mark Larson

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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0I0106 - General Preparation (GC)										
LCS (P0I0106-BS1)				Prepared & Analyzed: 09/01/20						
Benzene	0.101	0.00100	mg/kg wet	0.100		101	70-130			
Toluene	0.0976	0.00100	"	0.100		97.6	70-130			
Ethylbenzene	0.105	0.00100	"	0.100		105	70-130			
Xylene (p/m)	0.199	0.00200	"	0.200		99.3	70-130			
Xylene (o)	0.0991	0.00100	"	0.100		99.1	70-130			
Surrogate: 1,4-Difluorobenzene	*0.106*		*"*	*0.120*		*88.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.102*		*"*	*0.120*		*85.3*	*75-125*			
LCS Dup (P0I0106-BSD1)				Prepared & Analyzed: 09/01/20						
Benzene	0.0934	0.00100	mg/kg wet	0.100		93.4	70-130	7.90	20	
Toluene	0.0875	0.00100	"	0.100		87.5	70-130	10.9	20	
Ethylbenzene	0.0937	0.00100	"	0.100		93.7	70-130	11.6	20	
Xylene (p/m)	0.179	0.00200	"	0.200		89.4	70-130	10.5	20	
Xylene (o)	0.0878	0.00100	"	0.100		87.8	70-130	12.1	20	
Surrogate: 1,4-Difluorobenzene	*0.106*		*"*	*0.120*		*88.3*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0997*		*"*	*0.120*		*83.1*	*75-125*			
Calibration Blank (P0I0106-CCB1)				Prepared & Analyzed: 09/01/20						
Benzene	0.00		mg/kg wet							
Toluene	0.700		"							
Ethylbenzene	0.410		"							
Xylene (p/m)	0.770		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.104*		*"*	*0.120*		*86.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.101*		*"*	*0.120*		*84.3*	*75-125*			
Calibration Blank (P0I0106-CCB2)				Prepared & Analyzed: 09/01/20						
Benzene	0.00		mg/kg wet							
Toluene	0.590		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.480		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.103*		*"*	*0.120*		*85.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.102*		*"*	*0.120*		*85.1*	*75-125*			

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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0I0106 - General Preparation (GC)										
Calibration Check (P0I0106-CCV1)				Prepared & Analyzed: 09/01/20						
Benzene	0.0915	0.00100	mg/kg wet	0.100		91.5	80-120			
Toluene	0.0827	0.00100	"	0.100		82.7	80-120			
Ethylbenzene	0.0869	0.00100	"	0.100		86.9	80-120			
Xylene (p/m)	0.178	0.00200	"	0.200		88.8	80-120			
Xylene (o)	0.0913	0.00100	"	0.100		91.3	80-120			
Surrogate: 4-Bromofluorobenzene	*0.108*		*"*	*0.120*		*89.9*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.103*		*"*	*0.120*		*85.9*	*75-125*			
Calibration Check (P0I0106-CCV2)				Prepared & Analyzed: 09/01/20						
Benzene	0.101	0.00100	mg/kg wet	0.100		101	80-120			
Toluene	0.0946	0.00100	"	0.100		94.6	80-120			
Ethylbenzene	0.0970	0.00100	"	0.100		97.0	80-120			
Xylene (p/m)	0.190	0.00200	"	0.200		94.9	80-120			
Xylene (o)	0.0986	0.00100	"	0.100		98.6	80-120			
Surrogate: 1,4-Difluorobenzene	*0.108*		*"*	*0.120*		*89.7*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.104*		*"*	*0.120*		*86.7*	*75-125*			
Calibration Check (P0I0106-CCV3)				Prepared: 09/01/20 Analyzed: 09/02/20						
Benzene	0.0973	0.00100	mg/kg wet	0.100		97.3	80-120			
Toluene	0.0976	0.00100	"	0.100		97.6	80-120			
Ethylbenzene	0.101	0.00100	"	0.100		101	80-120			
Xylene (p/m)	0.196	0.00200	"	0.200		97.8	80-120			
Xylene (o)	0.105	0.00100	"	0.100		105	80-120			
Surrogate: 4-Bromofluorobenzene	*0.109*		*"*	*0.120*		*90.7*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.106*		*"*	*0.120*		*88.2*	*75-125*			
Matrix Spike (P0I0106-MS1)	**Source: 0I01007-01**			Prepared & Analyzed: 09/01/20						
Benzene	0.0681	0.00110	mg/kg dry	0.110	ND	62.0	80-120			QM-07
Toluene	0.0473	0.00110	"	0.110	0.00110	42.0	80-120			QM-07
Ethylbenzene	0.0508	0.00110	"	0.110	0.00590	40.9	80-120			QM-07
Xylene (p/m)	0.105	0.00220	"	0.220	0.0345	32.3	80-120			QM-07
Xylene (o)	0.0502	0.00110	"	0.110	0.0119	34.8	80-120			QM-07
Surrogate: 4-Bromofluorobenzene	*0.112*		*"*	*0.132*		*85.2*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.121*		*"*	*0.132*		*91.7*	*75-125*			

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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0I0106 - General Preparation (GC)										
Matrix Spike Dup (P0I0106-MSD1)		**Source: 0I01007-01**		Prepared: 09/01/20 Analyzed: 09/02/20						
Benzene	0.0710	0.00110	mg/kg dry	0.110	ND	64.7	80-120	4.23	20	QM-07
Toluene	0.0453	0.00110	"	0.110	0.00110	40.2	80-120	4.28	20	QM-07
Ethylbenzene	0.0501	0.00110	"	0.110	0.00590	40.2	80-120	1.58	20	QM-07
Xylene (p/m)	0.102	0.00220	"	0.220	0.0345	30.7	80-120	5.07	20	QM-07
Xylene (o)	0.0480	0.00110	"	0.110	0.0119	32.8	80-120	5.86	20	QM-07
Surrogate: 4-Bromofluorobenzene	*0.114*		*"*	*0.132*		*86.1*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.124*		*"*	*0.132*		*94.2*	*75-125*			

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H3108 - * DEFAULT PREP *** **										
Blank (P0H3108-BLK1)				Prepared & Analyzed: 08/31/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0H3108-BS1)				Prepared & Analyzed: 08/31/20						
Chloride	405	1.00	mg/kg wet	400		101	80-120			
LCS Dup (P0H3108-BSD1)				Prepared & Analyzed: 08/31/20						
Chloride	404	1.00	mg/kg wet	400		101	80-120	0.220	20	
Calibration Blank (P0H3108-CCB1)				Prepared & Analyzed: 08/31/20						
Chloride	0.00		mg/kg wet							
Calibration Blank (P0H3108-CCB2)				Prepared & Analyzed: 08/31/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0H3108-CCV1)				Prepared & Analyzed: 08/31/20						
Chloride	19.8		mg/kg	20.0		99.0	0-200			
Calibration Check (P0H3108-CCV2)				Prepared & Analyzed: 08/31/20						
Chloride	19.9		mg/kg	20.0		99.4	0-200			
Calibration Check (P0H3108-CCV3)				Prepared: 08/31/20 Analyzed: 09/01/20						
Chloride	18.8		mg/kg	20.0		94.0	0-200			
Matrix Spike (P0H3108-MS1)	**Source: 0H31003-01**			Prepared & Analyzed: 08/31/20						
Chloride	9090	10.8	mg/kg dry	1080	7970	105	80-120			
Matrix Spike (P0H3108-MS2)	**Source: 0H31003-11**			Prepared & Analyzed: 08/31/20						
Chloride	524	1.05	mg/kg dry	526	18.7	96.0	80-120			

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H3108 - * DEFAULT PREP *** **										
Matrix Spike Dup (P0H3108-MSD1)	**Source: 0H31003-01**			Prepared & Analyzed: 08/31/20						
Chloride	8950	10.8	mg/kg dry	1080	7970	91.5	80-120	1.58	20	
Matrix Spike Dup (P0H3108-MSD2)	**Source: 0H31003-11**			Prepared & Analyzed: 08/31/20						
Chloride	555	1.05	mg/kg dry	526	18.7	102	80-120	5.70	20	
Batch P0I0103 - * DEFAULT PREP *** **										
Blank (P0I0103-BLK1)				Prepared & Analyzed: 09/01/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0I0103-BS1)				Prepared & Analyzed: 09/01/20						
Chloride	409	1.00	mg/kg wet	400		102	80-120			
LCS Dup (P0I0103-BSD1)				Prepared & Analyzed: 09/01/20						
Chloride	408	1.00	mg/kg wet	400		102	80-120	0.245	20	
Calibration Blank (P0I0103-CCB1)				Prepared & Analyzed: 09/01/20						
Chloride	0.00		mg/kg wet							
Calibration Blank (P0I0103-CCB2)				Prepared & Analyzed: 09/01/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0I0103-CCV1)				Prepared & Analyzed: 09/01/20						
Chloride	18.9		mg/kg	20.0		94.7	0-200			
Calibration Check (P0I0103-CCV2)				Prepared & Analyzed: 09/01/20						
Chloride	19.0		mg/kg	20.0		95.0	0-200			

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0I0103 - * DEFAULT PREP *** **										
Calibration Check (P0I0103-CCV3)				Prepared & Analyzed: 09/01/20						
Chloride	19.1		mg/kg	20.0		95.7	0-200			
Matrix Spike (P0I0103-MS1)		Source: 0H31003-21		Prepared & Analyzed: 09/01/20						
Chloride	531	1.03	mg/kg dry	515	28.7	97.5	80-120			
Matrix Spike (P0I0103-MS2)		Source: 0H31003-31		Prepared & Analyzed: 09/01/20						
Chloride	516	1.04	mg/kg dry	521	20.6	95.2	80-120			
Matrix Spike Dup (P0I0103-MSD1)		Source: 0H31003-21		Prepared & Analyzed: 09/01/20						
Chloride	515	1.03	mg/kg dry	515	28.7	94.3	80-120	3.10	20	
Matrix Spike Dup (P0I0103-MSD2)		Source: 0H31003-31		Prepared & Analyzed: 09/01/20						
Chloride	513	1.04	mg/kg dry	521	20.6	94.5	80-120	0.692	20	
Batch P0I0105 - * DEFAULT PREP *** **										
Blank (P0I0105-BLK1)				Prepared & Analyzed: 09/01/20						
% Moisture	ND	0.1	%							
Blank (P0I0105-BLK2)				Prepared & Analyzed: 09/01/20						
% Moisture	ND	0.1	%							
Blank (P0I0105-BLK3)				Prepared & Analyzed: 09/01/20						
% Moisture	ND	0.1	%							
Blank (P0I0105-BLK4)				Prepared & Analyzed: 09/01/20						
% Moisture	ND	0.1	%							

Larson & Associates, Inc.
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Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0I0105 - * DEFAULT PREP *** **										
Blank (P0I0105-BLK5)				Prepared & Analyzed: 09/01/20						
% Moisture	ND	0.1	%							
Blank (P0I0105-BLK6)				Prepared & Analyzed: 09/01/20						
% Moisture	ND	0.1	%							
Blank (P0I0105-BLK7)				Prepared & Analyzed: 09/01/20						
% Moisture	ND	0.1	%							
Blank (P0I0105-BLK8)				Prepared & Analyzed: 09/01/20						
% Moisture	ND	0.1	%							
Duplicate (P0I0105-DUP1)		**Source: 0H28014-01**		Prepared & Analyzed: 09/01/20						
% Moisture	ND	0.1	%		ND				20	
Duplicate (P0I0105-DUP2)		**Source: 0H28016-09**		Prepared & Analyzed: 09/01/20						
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P0I0105-DUP3)		**Source: 0H28017-13**		Prepared & Analyzed: 09/01/20						
% Moisture	17.0	0.1	%		16.0			6.06	20	
Duplicate (P0I0105-DUP4)		**Source: 0H28017-23**		Prepared & Analyzed: 09/01/20						
% Moisture	13.0	0.1	%		12.0			8.00	20	
Duplicate (P0I0105-DUP5)		**Source: 0H28018-02**		Prepared & Analyzed: 09/01/20						
% Moisture	12.0	0.1	%		12.0			0.00	20	
Duplicate (P0I0105-DUP6)		**Source: 0H31003-07**		Prepared & Analyzed: 09/01/20						
% Moisture	3.0	0.1	%		3.0			0.00	20	

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Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0I0105 - * DEFAULT PREP *** **										
Duplicate (P0I0105-DUP7)		**Source: 0H31003-22**		Prepared & Analyzed: 09/01/20						
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P0I0105-DUP8)		**Source: 0H31003-32**		Prepared & Analyzed: 09/01/20						
% Moisture	4.0	0.1	%		3.0			28.6	20	R3
Duplicate (P0I0105-DUP9)		**Source: 0H31007-11**		Prepared & Analyzed: 09/01/20						
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P0I0105-DUPA)		**Source: 0H31008-05**		Prepared & Analyzed: 09/01/20						
% Moisture	11.0	0.1	%		12.0			8.70	20	
Duplicate (P0I0105-DUPB)		**Source: 0H31008-20**		Prepared & Analyzed: 09/01/20						
% Moisture	11.0	0.1	%		11.0			0.00	20	
Duplicate (P0I0105-DUPC)		**Source: 0H31008-30**		Prepared & Analyzed: 09/01/20						
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P0I0105-DUPD)		**Source: 0H31009-14**		Prepared & Analyzed: 09/01/20						
% Moisture	1.0	0.1	%		1.0			0.00	20	
Duplicate (P0I0105-DUPE)		**Source: 0H31009-24**		Prepared & Analyzed: 09/01/20						
% Moisture	4.0	0.1	%		2.0			66.7	20	R3

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H3113 - TX 1005										
Blank (P0H3113-BLK1)				Prepared & Analyzed: 08/31/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*97.1*		*"*	*100*		*97.1*	*70-130*			
Surrogate: o-Terphenyl	*51.7*		*"*	*50.0*		*103*	*70-130*			
LCS (P0H3113-BS1)				Prepared & Analyzed: 08/31/20						
C6-C12	819	25.0	mg/kg wet	1000		81.9	75-125			
>C12-C28	903	25.0	"	1000		90.3	75-125			
Surrogate: 1-Chlorooctane	*102*		*"*	*100*		*102*	*70-130*			
Surrogate: o-Terphenyl	*49.8*		*"*	*50.0*		*99.6*	*70-130*			
LCS Dup (P0H3113-BSD1)				Prepared & Analyzed: 08/31/20						
C6-C12	819	25.0	mg/kg wet	1000		81.9	75-125	0.00855	20	
>C12-C28	906	25.0	"	1000		90.6	75-125	0.282	20	
Surrogate: 1-Chlorooctane	*105*		*"*	*100*		*105*	*70-130*			
Surrogate: o-Terphenyl	*51.9*		*"*	*50.0*		*104*	*70-130*			
Calibration Check (P0H3113-CCV1)				Prepared & Analyzed: 08/31/20						
C6-C12	469	25.0	mg/kg wet	500		93.8	85-115			
>C12-C28	473	25.0	"	500		94.5	85-115			
Surrogate: 1-Chlorooctane	*108*		*"*	*100*		*108*	*70-130*			
Surrogate: o-Terphenyl	*52.8*		*"*	*50.0*		*106*	*70-130*			
Calibration Check (P0H3113-CCV2)				Prepared & Analyzed: 08/31/20						
C6-C12	476	25.0	mg/kg wet	500		95.3	85-115			
>C12-C28	486	25.0	"	500		97.2	85-115			
Surrogate: 1-Chlorooctane	*111*		*"*	*100*		*111*	*70-130*			
Surrogate: o-Terphenyl	*54.4*		*"*	*50.0*		*109*	*70-130*			

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
Project Manager: Mark Larson

Fax: (432) 687-0456

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H3113 - TX 1005										
Matrix Spike (P0H3113-MS1)	**Source: 0H31003-01**			Prepared: 08/31/20 Analyzed: 09/01/20						
C6-C12	1060	26.9	mg/kg dry	1080	11.9	97.8	75-125			
>C12-C28	1210	26.9	"	1080	43.8	109	75-125			
Surrogate: 1-Chlorooctane	*117*		*"*	*108*		*109*	*70-130*			
Surrogate: o-Terphenyl	*55.9*		*"*	*53.8*		*104*	*70-130*			
Matrix Spike Dup (P0H3113-MSD1)	**Source: 0H31003-01**			Prepared: 08/31/20 Analyzed: 09/01/20						
C6-C12	1030	26.9	mg/kg dry	1080	11.9	95.1	75-125	2.81	20	
>C12-C28	1160	26.9	"	1080	43.8	104	75-125	4.09	20	
Surrogate: 1-Chlorooctane	*111*		*"*	*108*		*103*	*70-130*			
Surrogate: o-Terphenyl	*53.0*		*"*	*53.8*		*98.6*	*70-130*			

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Midland TX, 79710

Project: Dagger Lake Pit
Project Number: 20-0100-05
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Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
ROI	Received on Ice
R3	The RPD exceeded the acceptance limit due to sample matrix effects.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 9/3/2020

Brent Barron, Laboratory Director/Technical Director

Larson & Associates, Inc.	Project: Dagger Lake Pit	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 20-0100-05	
Midland TX, 79710	Project Manager: Mark Larson	

№1273

CHAIN-OF-CUSTOD

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

DATE: 8/31/2020 PAGE 1 OF 3

PO#: LAB WORK ORDER#: 0H31003

PROJECT LOCATION OR NAME: Dagger Lake PH-E

LAI PROJECT #: 20-0100-05 COLLECTOR: DS/TJ

Data Reported to:

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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

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

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

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
S-1, 1'	1	8/28/20	10:37	S	1				X		X X X X X	Stop chloride when below 600 mg/Kg
S-1, 3'	2		10:40								X X X X X	
S-1, 5'	3		10:42									
S-1, 10'	4		10:44									
S-2, 1'	5		11:15								X X X X X	
S-2, 3'	6		11:17								X X X X X	
S-2, 5'	7		11:20									
S-2, 10'	8		11:22									
S-3, 1'	9		12:10								X X X X X	
S-3, 3'	10		12:12								X X X X X	
S-3, 5'	11		12:13									
S-3, 10'	12		12:15									
S-4, 1'	13		12:40								X X X X X	
S-4, 3'	14		12:42								X X X X X	
S-4, 5'	15		12:45									
TOTAL					15							

RELINQUISHED BY:(Signature) DATE/TIME 8/31/20 0:10 RECEIVED BY: (Signature) Tyra Bledsoe

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

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

LABORATORY: PBEL

TURN AROUND TIME
NORMAL ☒ 5 Day
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 0.0 1.0 CF-H C2 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

DATE: 8/31/2020 PAGE 2 OF 3

PO#: LAB WORK ORDER#: 0H31003

PROJECT LOCATION OR NAME: Dog's Lake Pit

LAI PROJECT #: 20-0100-05 COLLECTOR: DS/TJ

Data Reported to:

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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

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

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ | OIL - MOD 8015 ☐ | 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 ☐

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
S-4, 10'	16	8/28/20	12:47	S	1				X		Cl	Stop chloride
S-9, 1'	17		11:00								BTEX, GRO, DRO, ORO	when below
S-9, 3'	18		11:02								BTEX, GRO, DRO, ORO	600 mg/kg
S-9, 5'	19		11:05									
S-9, 10'	20		11:07									
S-10, 1'	21		11:30								BTEX, GRO, DRO, ORO	
S-10, 3'	22		11:32								BTEX, GRO, DRO, ORO	
S-10, 5'	23		11:35									
S-10, 10'	24		11:36									
S-11, 1'	25		12:20								BTEX, GRO, DRO, ORO	
S-11, 3'	26		12:22								BTEX, GRO, DRO, ORO	
S-11, 5'	27		12:25									
S-11, 10'	28		12:27									
S-12, 1'	29		12:55								BTEX, GRO, DRO, ORO	
S-12, 3'	30		12:57								BTEX, GRO, DRO, ORO	
TOTAL					15							

RELINQUISHED BY:(Signature) DATE/TIME 8/31/20 10:10 RECEIVED BY: (Signature) Teresa Belmore

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

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

LABORATORY: PBEL

TURN AROUND TIME
NORMAL ☒ 5 Day
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 0.0 1.0 THERM#: CF1 C2
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # ☐ HAND DELIVERED

№ 1275

CHAIN-OF-CUSTODY

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

Data Reported to:

DATE: 8/31/2020 PAGE 3 OF 3

PO#: _____ LAB WORK ORDER#: 0H31003

PROJECT LOCATION OR NAME: Dagger Lake P.I.

LAI PROJECT #: 20-0100-05 COLLECTOR: DS/TJ

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
S-12 5'	31	8/28/20	13:00	S	1				X		BTEX ☐ MTBE ☐ TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☐ OIL - MOD 8015 ☐ 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 ☐ CHLORIDES ☐ ANIONS ☐ ALKALINITY ☐	Stop chloride when below 600 mg/kg
S-12 10'	32	1	13:00	1	1				1		1	
TOTAL					2							

RELINQUISHED BY:(Signature) DATE/TIME 8/31/20 10:10 RECEIVED BY: (Signature) Trina Bledsoe

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

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

LABORATORY: PBEL

TURN AROUND TIME
NORMAL ☒ 5 Day
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 0.0 1.0 CF 1 C2 THERM#: _____
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

Appendix E

Photographs

nRM2019638426
Remediation Deferral Request
Dagger State Com #504H
Produced Water Spill
October 20, 2020

Spill area adjacent to pond viewing north

Spill area on earthen embankment viewing west

nRM2019638426
Remediation Deferral Request
Dagger State Com #504H
Produced Water Spill
October 20, 2020

Spill on earthen embankment and liner viewing south

Spill area on liner viewing northwest/north

nRM2019638426
Remediation Deferral Request
Dagger State Com #504H
Produced Water Spill
October 20, 2020

Spill area on liner viewing west

Spill area on liner viewing west

nRM2019638426
Remediation Deferral Request
Dagger State Com #504H
Produced Water Spill
October 20, 2020

Flowback equipment within spill area viewing east/southeast

High pressure lay flat lines within spill area viewing southeast

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 11662

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
ADVANCE ENERGY PARTNERS HAT ME	11490 Westheimer Rd., Ste 950	Houston, TX77077	372417	11662	C-141

OCD Reviewer	Condition
ceads	The OCD does not accept the depth to groundwater determinatation as provided. When nearby wells are used to determine depth to groundwater, the wells should within 0.5 mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. Should the responsible party encounter soils exceeding the most stringent levels listed in Table I, they will need to remediate accordingly in lieu of drilling to determine the depth to groundwater.
ceads	The deferral request is not approved at this time. Once remediation has been completed to the maximum extent possible, the responsible party may submit to the OCD a deferral request in their following report.