

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

RECEIVED

By JKeyes at 2:47 pm, Jan 19, 2016

Form C-141

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Plains Marketing, LP	Contact	Camille Bryant
Address	2530 State Hwy. 214, Denver City, TX 79323	Telephone No.	(575) 441-1099
Facility Name	Lovington Station Tank 117275	Facility Type	Tank
Surface Owner	New Mexico State Land Office	Mineral Owner	
		Lease No.	

LOCATION OF RELEASE

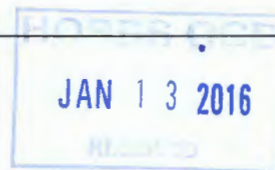
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	21	18S	36E					Lea

Latitude N 32.73427° Longitude W 103.35266°

NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	101 bbls	Volume Recovered	66 bbls
Source of Release	Tank	Date and Hour of Occurrence	08/05/2015 @ 08:00	Date and Hour of Discovery	08/05/2015 @ 08:22
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Verbal notification to Kellie Jones		
By Whom?	Camille Bryant	Date and Hour	08/05/2015 @ 15:28		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

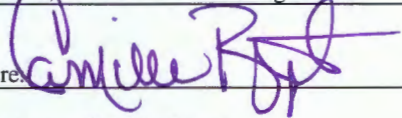

If a Watercourse was Impacted, Describe Fully.*



Describe Cause of Problem and Remedial Action Taken.* Internal corrosion caused a hole to develop in the floor of tank 117275 resulting in a release of crude oil.

Describe Area Affected and Cleanup Action Taken. The released crude oil impacted an area inside the secondary containment measuring approximately 40' X 80'. The release was remediated as per NMOCD recommended guidelines. Please reference the attached *Remediation Summary and Risk-Based Closure Report* dated December 29, 2015 for remediation details.

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

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Camille Bryant	Approved by District Supervisor: 		
Title: Remediation Coordinator	Approval Date: 01/19/2016	Expiration Date:	
E-mail Address: cjbryant@paalp.com	Conditions of Approval: RP will remain open until abandonment at which point remaining contamination will need to be addressed.		Attached <input type="checkbox"/>
Date: 1/12/2016	Phone: (575) 441-1099		

* Attach Additional Sheets If Necessary

1 RP-3791

JAN 13 2016

Remediation Summary and Risk-Based Closure Report

Lovington Station Tank 11275

Plains SRS No. 2015-162

NMOCD Ref. No. 1RP-3791

Lea County, New Mexico

Unit Letter "H", Section 21, Township 18 South, Range 36 East

Latitude 32.73427° / Longitude -103.35266°

December 29, 2015

Terracon Project No. AR157446



Distribution:

Copy 1: Plains – Midland, TX

Copy 2: New Mexico Oil Conservation Division – District I

Copy 3: New Mexico State Land Office

Prepared for:

Plains Marketing, L.P.

Midland, Texas

Prepared by:

Terracon Consultants, Inc.

Lubbock, Texas

terracon.com

Terracon

Environmental

Facilities

Geotechnical

Materials

December 29, 2015



Plains Marketing, L.P.
505 N. Big Spring, Suite 600
Midland, Texas 79701

Attn: Ms. Camille Bryant
P: (432) 221-7922
E: cjbryant@paalp.com

Re: Remediation Summary and Closure Report
Lovington Station Tank 11275
Plains SRS No. 2015-162
NMOCD Ref. No. 1RP-3791
Lea County, New Mexico
Latitude 32.73427° / Longitude -103.35266°
Terracon Project No. AR157446

Dear Ms. Bryant:

Terracon is pleased to submit two copies of the *Remediation Summary and Risk-Based Closure Report* for the above-referenced site.

We appreciate the opportunity to provide site remediation services at the Lovington Station Tank Site for Plains Marketing, L.P. Please contact the undersigned at (806) 300-0140 if you have questions regarding the information provided in the report.

Sincerely,
Terracon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "Joel Lowry".

Joel Lowry
Project Geologist
Lubbock

A handwritten signature in blue ink, appearing to read "Erin Loyd".

Erin Loyd, PG
Senior Associate
Office Manager – Lubbock



A handwritten signature in blue ink, appearing to read "Erin Loyd", followed by the date "12/31/15".

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REMEDIATION SUMMARY AND RISK-BASED CLOSURE REPORT

Lovington Station Tank 11275
 Plains SRS Number 2015-099
 NMOCD Ref. No. 1RP-3791
 Terracon Project No. AR157446

December 29, 2015

1.0 INTRODUCTION & BACKGROUND INFORMATION

Terracon Consultants Inc. (Terracon), on behalf of Plains Marketing (Plains), has prepared this *Remediation Summary and Risk-Based Closure Report* for the release site known as Lovington Station Tank 11275 (hereafter referred to as the "site"). The site is located at 32.73427° North Latitude and 103.35266° West Longitude in Unit Letter "H", Section 21, Township 18 South, Range 36 East, in Lea County, New Mexico. The affected property is owned by the State of New Mexico and administered by the New Mexico State Land Office (NMSLO). A "Site Location Map" is provided as Figure 1 in Appendix A.

On August 5, 2015, Plains discovered a release had occurred at the Lovington Station Tank facility. The release was attributed to a failure within the floor of Tank 117275 due to internal corrosion. The "Release Notification and Correction Action Form" (NMOCD Form C-141) indicated that approximately 101 barrels (bbls) of crude oil were released with approximately 66 bbls being recovered. The release affected an area measuring approximately 2,100 square feet (sq. ft.) within a secondary containment measuring approximately 40 feet by 80 feet. Between August 11, 2015 and October 1, 2015, Terracon personnel oversaw the excavation of affected soil and conducted confirmation soil sampling activities at the site. Photographs of the site are provided in Appendix D.

Pursuant to the New Mexico Administrative Code (NMAC) 19.15.29, Plains personnel notified the New Mexico Oil Conservation Division (NMOCD) of the occurrence of the release due to the estimated volume of the release being greater than five barrels. A copy of the NMOCD Form C-141 is provided in Appendix E.

1.1 Site Description

Site Name	Lovington Station Tank 11275
GPS	Lat.: 32.73427°, Long: -103.35266°
Legal Description	U/L "H", Section 21, Township 18 South, Range 36 East
County	Lea County
General Description	The release site consists of three (3) aboveground storage tanks (ASTs) located within a secondary earthen containment.

A "Site Location Map" and "Site Diagram" are included as Figures 1 and 2, respectively, in Appendix A.

1.2 Regulatory Framework

Crude oil facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). Contamination of soil due to a surface release of petroleum hydrocarbons is addressed in the NMOCD guidance document titled *Guidelines for Remediation of Leaks, Spills and Releases*, dated August 13, 1993.

The guidance document provides direction for initial response actions, site assessment, sampling procedures and provides a total ranking score based on the depth to groundwater, distance to private and domestic water sources, and the distance to the nearest surface water body as follows:

Ranking Score Criteria		
General Site Characteristics		Score
Depth to Ground Water	< 50 feet	20
	50 – 99 feet	10
	> 100 feet	0
Well Head Protection Area, <1,000 feet from water source, or <200 feet from private domestic water source	Yes	20
	No	0
Distance to Surface Water Body	< 200 feet	20
	200 – 1,000 feet	10
	> 1,000 feet	0

The total ranking score is the sum of the four individual ranking criteria and the basis for determining the recommended remediation action levels at the site.

Recommended Remediation Action Levels			
Contaminant of Concern	Total Ranking Score		
	>19	10-19	0-9
Benzene	10 mg/kg	10 mg/kg	10 mg/kg
BTEX	50 mg/kg	50 mg/kg	50 mg/kg
TPH	100 mg/kg	1,000 mg/kg	5,000 mg/kg

The NMAC does not specify a recommended remediation action level for chloride in soil. Recommended remediation action levels for chloride are determined by the NMOCD on a site-specific basis.

1.3 NMOCD Site Ranking

Based on Terracon's evaluation of the site ranking criteria, the Site has an initial total ranking score of 10 points, based on the following:

- Review of the New Mexico Water Rights Reporting System (NMWRRS) database indicates the average depth to groundwater for Section 21, Township 18 South, Range 36 East is approximately 56 feet bgs.
- Review of the NMWRRS database indicates there are no registered water wells within 1,000 feet of the Site.
- Review of available United States Geological Survey (USGS) topographical maps indicates that there are no surface water bodies within 1,000 feet of the Site.

Total Ranking Score for Site			
Ranking Score Criteria			Score
Depth to Ground Water	< 50 feet	20	10
	50 – 99 feet	10	
	> 100 feet	0	
Well Head Protection Area, <1,000 feet from water source, or; <200 feet from private domestic water source	Yes	20	0
	No	0	
Distance to Surface Water Body	< 200 feet	20	0
	200 – 1,000 feet	10	
	> 1,000 feet	0	
Total Ranking Score			10

Recommended remediation action levels for a site with a total ranking score of 10 points are as follows:

- Benzene – 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene and xylene (BTEX) – 50 mg/kg
- Total petroleum hydrocarbons (TPH) – 1,000 mg/kg

1.4 Scope of Services

The Scope of Services for Terracon as requested by Plains Marketing included:

- Oversight of the remediation of impacted soil;
- Collection of confirmation soil samples; and
- Submittal of a Remediation Summary and Closure Report detailing field activities, analytical results, site maps and photographs.

2.0 LIMITATIONS

2.1 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report.

2.2 Additional Scope Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this remediation activities. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

2.3 Reliance

This report has been prepared for the exclusive use of Plains Marketing, L.P., and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Plains Marketing, L.P. and Terracon. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in this report, and Terracon's Terms and Conditions. The

limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

3.0 SUMMARY OF FIELD ACTIVITIES

3.1 Site Investigation

Following notification of a crude oil release that occurred on August 5, 2015 at the Lovington Station facility, Terracon visited the site with a Plains representative. The release was attributed to a failure within the floor of Tank 11275 due to internal corrosion. It is estimated that approximately 101 bbls of crude oil were released with approximately 66 bbls being recovered. The release was confined to the 40 feet by 80 feet secondary containment, affecting an area measuring approximately 2,100 sq. ft. During initial response activities, Plains personnel responded to the reported incident, secured the release site, recovered free-standing fluid and repaired the affected aboveground storage tank (AST). A "Site Diagram" is provided as Figure 2 in Appendix A.

3.2 Remediation Summary and Soil Sampling Activities

August 11, 2015

Excavation activities commenced at the release site. Affected soil in the western portion of the earthen containment was excavated and stockpiled on-site, atop a polyurethane liner pending final disposition.

August 14, 2015

Following the excavation of affected soil within the western portion of the earthen containment, Terracon collected 12 confirmation soil samples from the floor and sidewalls of the excavated area and relinquished with the chain of custody forms to Permian Basin Environmental Lab, LP (PBEL) of Midland, Texas, for TPH analysis. The location of the confirmation soil sample locations are illustrated on Figure 2, Appendix A.

Laboratory analytical results indicated TPH concentrations were not detected above applicable laboratory reporting limits (RL) for soil samples WSW #1 @ 1', W. AST @ Surf., W. AST @ 18", NSW #1 @ 1', N. AST @ Surf. and S. AST @ 1'. TPH concentrations were detected at concentrations ranging from 41.2 milligrams per kilogram (mg/kg) in soil sample N. AST @ 2' to 264 milligrams per kilogram (mg/kg) in soil sample S. AST @ Surf.

Confirmation soil samples collected with the excavation margins, with the exception of soil samples W. AST @ 18", N. AST @ 2', and S. AST @ 3', were analyzed for concentrations of

Remediation Summary and Risk-Based Closure Report

Lovington Station Tank 11275 ■ Lea County, New Mexico

Plains SRS 2015-162 ■ Terracon Project No. AR157446



BTEX. BTEX constituents were not detected above applicable laboratory RLs in each of the submitted soil samples.

Soil samples W. Floor @ 30", N. Floor @ 3' and S. Floor @ 4' were analyzed for concentrations of chloride. The laboratory results indicated chloride concentrations of 6.49 mg/kg, 5.73 mg/kg, and 4.66 mg/kg, respectively.

Based on the review of the laboratory analytical results, the indicated benzene, BTEX, TPH and chloride concentrations were less than the applicable NMOCD regulatory remediation action levels in each of the analyzed soil samples. A summary of confirmation soil sample analytical results is provided in Table 1 of Appendix B. The executed chain-of-custody forms, laboratory data sheets, and analytical summary table are provided in Appendix C.

August 18, 2015

One five point-composite sample (8/18 Stockpile) was collected from the excavation stockpile material and relinquished with chain of custody forms to the laboratory for analysis of TPH. The laboratory analysis of the soil sample indicated a TPH concentration of 2,370 mg/kg. Based on the magnitude of the detected TPH concentration in soil sample 8/18 Stockpile, the excavated materials would require disposition at an NMOCD-permitted disposal facility.

August 26, 2015

Upon receiving NMOCD permission, the excavated area in the western portion of the site was backfilled with locally purchased material. Upon backfilling the excavated area in the western portion of the site, excavation of affected soil in the eastern portion of the site commenced. Excavated soil was placed atop a polyurethane liner with the existing soil stockpile.

September 2, 2015

Terracon collected three confirmation soil samples (ESW #1 @ 1', E. Floor @ 2' and E. AST @ Surf.) from the floor and sidewalls of the excavated area in the eastern portion of the site and relinquished with the chain of custody forms to the laboratory for analysis of BTEX and TPH concentrations.

Analytical results indicated TPH concentrations ranged from less than the laboratory RL for soil sample E. Floor @ 2' to 706 mg/kg for soil sample E. AST @ Surf.

Laboratory analytical results indicated BTEX concentrations ranged from less than the applicable laboratory RL for soil samples ESW #1 @ 1' and E. Floor @ 2' to 0.00601 mg/kg for soil sample E. AST @ Surf. Benzene concentrations were not detected above applicable laboratory RLs in each of the submitted soil samples.

Remediation Summary and Risk-Based Closure Report

Lovington Station Tank 11275 ■ Lea County, New Mexico

Plains SRS 2015-162 ■ Terracon Project No. AR157446



Soil sample E. Floor @ 2' was also analyzed for concentrations of chloride, which were determined to be 11.1 mg/kg. Laboratory analytical results indicated benzene, BTEX, TPH and chloride concentrations were less than the applicable NMOCD regulatory remediation action levels in each of the analyzed soil samples.

A hand-auger was used to collect two additional soil samples (East RP @ Surf. and RP @ 18") in the area of the release point in an effort to characterize affected soil left in-situ beneath the east side of the southern AST. Collected soil samples were relinquished with chain of custody forms to the laboratory for analysis of BTEX and TPH.

Laboratory analytical results indicated soil sample East RP @ Surface exhibited a benzene concentration of 0.00501 mg/kg, a BTEX concentration of 0.4205 mg/kg and a TPH concentration of 16,900 mg/kg. Analytical results indicated soil sample RP @ 18" exhibited a benzene concentration of 0.00342 mg/kg, a BTEX concentration of 0.0239 mg/kg and a TPH concentration of less than the laboratory RL.

Based on the results of laboratory analysis, it was determined soil was not affected above NMOCD recommended remediation action levels beyond 18 inches bgs in the area characterized by soil samples East RP @ Surf and RP @ 18". Plains maintains excavating impacted soil at the release point beneath the eastern side of the southern AST will compromise the integrity of the tank and poses a risk to public health and safety.

September 22, 2015

Upon receiving NMOCD permission, the excavated area in the eastern portion of the site was backfilled with locally purchased material. Prior to backfilling, the excavated area measured approximately 80 feet in length, 40 feet in width and ranged from 2 to 3 feet in depth. Upon backfilling the excavated area, a surficial clean-up was conducted in the vicinity of the release point, in the area characterized by soil sample East RP @ Surf.

October 13 and 14, 2015

Approximately 760 cy of impacted soil was transported to Lazy Ace Landfarm, LLC (NMOCD Permit # NM1-041) for disposal.

3.3 Laboratory Analytical Methods

Confirmation soil samples collected at the site were placed in laboratory-prepared containers, labeled and placed on ice in the field. The samples were relinquished with chain-of-custody forms to Permian Basin Environmental Lab, LP, of Midland, Texas, for analysis of BTEX, TPH and/or chloride using the following methods:

Remediation Summary and Risk-Based Closure Report

Lovington Station Tank 11275 ■ Lea County, New Mexico

Plains SRS 2015-162 ■ Terracon Project No. AR157446



- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method 300.

4.0 RECOMMENDATIONS

Remediation activities conducted at the Lovington Station Tank 11275 release site met the objectives set forth by the NMOCD. Laboratory analytical results from excavation confirmation soil samples indicate BTEX, TPH and/or chloride concentrations were less than NMOCD regulatory remediation action levels in each of the submitted soil samples, with the exception of the TPH concentration in soil sample East RP @ Surface.

Based on field activities and review of laboratory analytical results from confirmation soil samples collected from the excavated area, additional remediation and/or investigation activities are not warranted at the site at this time. Soil exhibiting TPH concentrations above NMOCD recommended remediation action levels in the area characterized by soil sample East RP @ Surface will be remediated at time of abandonment (TOA).

Terracon respectfully submits this *Remediation Summary and Risk-Based Closure Report* to Plains Marketing, L.P., as documentation of the site remediation activities at the Lovington Station Tank 11275 site. Remediation activities conducted at the Lovington Station Tank 11275 site met the objectives set forth by the NMOCD. Based on the completion of field activities and sample analysis to date, Terracon recommends no further action be taken in regards to the documented release to the site at this time.

APPENDIX A

Figure 1 – Site Location Map

Figure 2 – Site Diagram

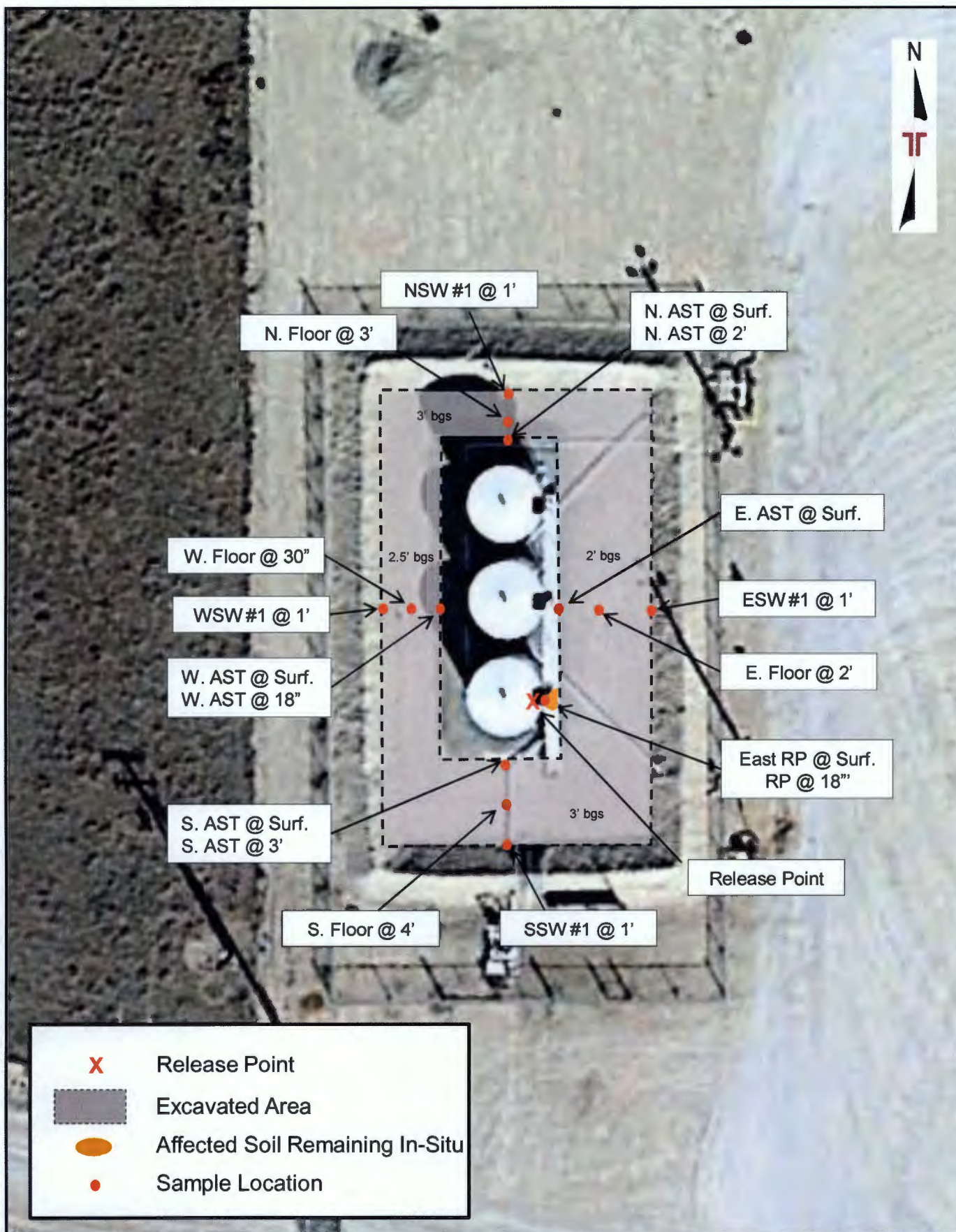


Project No. AR157446
 Scale: 1" = ~1 Mile'
 Source: Google Earth
 Date: 2014

Terracon
 Consulting Engineers & Scientists
 5827 50th St, Suite 1 Lubbock, Texas 79424
 PH. (806) 300-0104 FAX. (806) 797 0947

Figure 1 – Site Location Map

Lovington Station Tank
 Plains SRS No. 2015-162
 32.73427° N, -103.35266° W
 Lea County, New Mexico



Project No. AR157446
 Scale: 1"=25'
 Source: GoogleEarth
 Date: 2014

Terracon
 Consulting Engineers & Scientists

5827 50th St. Suite 1 Lubbock, Texas 79424
 Phone (806) 300-0140 Fax (806) 797-0947

Figure 2 – Site and Sample Location Map

Lovington Station Tank
 Plains SRS No. 2015-162
 32.73427° N, -103.35266° W
 Lea County, New Mexico



APPENDIX B

Table 1 – Confirmation Soil Sample Analytical Results

Table 1
Confirmation Soil Sample Analytical Results - TPH¹, BTEX² and Chloride³
 Plains All American Pipeline - Lovington Station Tank
 Latitude: 32.73427°, Longitude: -103.35266°
 Terracon Project No. AR157446

Sample ID	Depth	Date	Sample Type	Soil Status	TPH				Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
					C ₆ -C ₁₂ (mg/kg)	C ₁₂ -C ₂₈ (mg/kg)	C ₂₈ -C ₃₅ (mg/kg)	C ₆ -C ₃₅ (mg/kg)						
WSW #1 @ 1'	1'	8/14/2015	Grab	In-Situ	<29.1	<29.1	<29.1	<29.1	<0.00116	<0.00233	<0.00116	<0.00233	<0.00233	-
W. Floor @ 30"	1.5'	8/14/2015	Grab	In-Situ	<29.1	128	<29.1	128	<0.00116	<0.00233	<0.00116	<0.00233	<0.00233	6.49
W. AST @ Surf.	Surface	8/14/2015	Grab	In-Situ	<28.7	<28.7	<28.7	<28.7	<0.00115	<0.00230	<0.00115	<0.00230	<0.00230	-
W. AST @ 18"	1.5'	8/14/2015	Grab	In-Situ	<29.8	<29.8	<29.8	<29.8	-	-	-	-	-	-
NSW #1 @ 1'	1'	8/14/2015	Grab	In-Situ	<28.4	<28.4	<28.4	<28.4	<0.00114	<0.00227	<0.00114	<0.00227	<0.00227	-
N. Floor @ 3'	3'	8/14/2015	Grab	In-Situ	<27.8	48	<27.8	48	<0.00111	<0.00222	<0.00111	<0.00222	<0.00222	5.73
N. AST @ Surf.	Surface	8/14/2015	Grab	In-Situ	<28.1	<28.1	<28.1	<28.1	<0.00112	<0.00225	<0.00112	<0.00225	<0.00225	-
N. AST @ 2'	2'	8/14/2015	Grab	In-Situ	<29.4	41.2	<29.4	41.2	-	-	-	-	-	-
SSW #1 @ 1'	1'	8/14/2015	Grab	In-Situ	<28.7	169	30.4	199	<0.00115	<0.00230	<0.00115	<0.00230	<0.00230	-
S. Floor @ 4'	4'	8/14/2015	Grab	In-Situ	<25.8	52.3	<25.8	52.3	<0.00103	<0.00206	<0.00103	<0.00206	<0.00206	4.66
S. AST @ Surf.	Surface	8/14/2015	Grab	In-Situ	<29.1	217	47.5	264	<0.00116	<0.00233	<0.00116	<0.00233	<0.00233	-
S. AST @ 3'	3'	8/14/2015	Grab	In-Situ	<27.8	<27.8	<27.8	<27.8	-	-	-	-	-	-
8/18 Stockpile	N/A	8/18/2015	Composite	Disposed	172	1,970	226	2,370	-	-	-	-	-	-
ESW #1 @ 1'	1'	9/2/2015	Grab	In-Situ	<29.1	188	50.6	238	<0.00116	<0.0023	<0.00116	<0.0023	<0.0023	-
E. Floor @ 2'	2'	9/2/2015	Grab	In-Situ	<28.7	<28.7	<28.7	<28.7	<0.00115	<0.00230	<0.00115	<0.00230	<0.00230	11.1
E. AST @ Surf.	Surface	9/2/2015	Grab	In-Situ	88.5	538	79	706	<0.00122	<0.00244	<0.00122	0.00601	0.00601	-
East RP @ Surf.	Surface	9/2/2015	Grab	Excavated	1,680	13,700	1,600	16,900	0.00501	0.0552	0.0562	0.3041	0.4205	-
RP @ 18"	1.5'	9/2/2015	Grab	In-Situ	<30.9	<30.9	<30.9	<30.9	0.00342	0.0041	0.00198	0.0144	0.0239	-
New Mexico Oil Conservation Division Regulatory Remediation Action Levels								1,000	10				50	250*

1. TPH = Total petroleum hydrocarbons analyzed by EPA Method SW-846 8015M.

2. BTEX = BTEX analyzed by EPA Method SW-846 8021b.

3. Chlorides = Chlorides analyzed by EPA Method E 300.

- = Soil sample not analyzed for that constituent.

< = Constituent not detected above the indicated laboratory reporting limit (RL).

N/A = Not Applicable

* = Remediation Action Levels for chloride are not currently specified in the New Mexico.

Bold denotes concentrations that exceeds NMOCD Regulatory Remediation Action Levels

Remediation Summary and Risk-Based Closure Report

Lovington Station Tank 11275 ■ Lea County, New Mexico

Plains SRS 2015-162 ■ Terracon Project No. AR157446



APPENDIX C
Laboratory Analytical Reports

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
10014 SCR 1213
Midland, TX 79706**



Analytical Report

Prepared for:

Joel Lowry
Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland, TX 79705

Project: Lovington Station Tank

Project Number: AR157446

Location: None Given

Lab Order Number: 5H17005



NELAP/TCEQ # T104704156-13-3

Report Date: 08/21/15

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WSW #1 @ 1'	5H17005-01	Soil	08/14/15 12:05	08-17-2015 15:25
W. Floor @ 30"	5H17005-02	Soil	08/14/15 12:10	08-17-2015 15:25
W. AST @ Surface	5H17005-03	Soil	08/14/15 12:12	08-17-2015 15:25
W. AST @ 18"	5H17005-04	Soil	08/14/15 12:15	08-17-2015 15:25
NSW #1 @ 1'	5H17005-05	Soil	08/14/15 13:30	08-17-2015 15:25
N. Floor @ 3'	5H17005-06	Soil	08/14/15 13:35	08-17-2015 15:25
N. AST @ Surface	5H17005-07	Soil	08/14/15 13:38	08-17-2015 15:25
N. AST @ 2'	5H17005-08	Soil	08/14/15 13:40	08-17-2015 15:25
SSW #1 @ 1'	5H17005-09	Soil	08/14/15 13:45	08-17-2015 15:25
S. Floor @ 4'	5H17005-10	Soil	08/14/15 13:48	08-17-2015 15:25
S. AST @ Surface	5H17005-11	Soil	08/14/15 13:50	08-17-2015 15:25
S. AST @ 3'	5H17005-12	Soil	08/14/15 13:53	08-17-2015 15:25

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24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

WSW #1 @ 1'
5H17005-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00116	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Toluene	ND	0.00233	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Ethylbenzene	ND	0.00116	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (p/m)	ND	0.00233	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (o)	ND	0.00116	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		124 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		110 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	14.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	29.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C12-C28	ND	29.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: 1-Chlorooctane		90.0 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: o-Terphenyl		115 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	29.1	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc	

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Midland TX, 79705

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Project Number: AR157446
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W. Floor @ 30"

5H17005-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00116	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Toluene	ND	0.00233	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Ethylbenzene	ND	0.00116	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (p/m)	ND	0.00233	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (o)	ND	0.00116	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		134 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		111 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	14.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	29.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C12-C28	128	29.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: 1-Chlorooctane		89.6 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: o-Terphenyl		114 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	128	29.1	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc	

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W. AST @ Surface
5H17005-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00115	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Toluene	ND	0.00230	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Ethylbenzene	ND	0.00115	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (p/m)	ND	0.00230	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (o)	ND	0.00115	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		122 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		113 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	13.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	28.7	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C12-C28	ND	28.7	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: 1-Chlorooctane		95.5 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: o-Terphenyl		120 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.7	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc	

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Project Manager: Joel Lowry

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W. AST @ 18"

5H17005-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

% Moisture	16.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	29.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M
>C12-C28	ND	29.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M
>C28-C35	ND	29.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M
Surrogate: 1-Chlorooctane		90.3 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M
Surrogate: o-Terphenyl		116 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M
Total Petroleum Hydrocarbon C6-C35	ND	29.8	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc

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Midland TX, 79705

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Project Number: AR157446
Project Manager: Joel Lowry

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NSW #1 @ 1'
5H17005-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00114	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Toluene	ND	0.00227	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Ethylbenzene	ND	0.00114	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (p/m)	ND	0.00227	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (o)	ND	0.00114	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		120 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		115 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	12.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	28.4	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C12-C28	ND	28.4	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: 1-Chlorooctane		90.9 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: o-Terphenyl		116 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.4	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc	

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N. Floor @ 3'
5H17005-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00111	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Toluene	ND	0.00222	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Ethylbenzene	ND	0.00111	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (p/m)	ND	0.00222	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		132 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		110 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	10.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	27.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C12-C28	48.0	27.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: 1-Chlorooctane		90.8 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: o-Terphenyl		115 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	48.0	27.8	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc	

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Project: Lovington Station Tank
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Project Manager: Joel Lowry

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N. AST @ Surface
5H17005-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

S-GC

Benzene	ND	0.00112	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Toluene	ND	0.00225	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Ethylbenzene	ND	0.00112	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (p/m)	ND	0.00225	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (o)	ND	0.00112	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		107 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		132 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	12.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	28.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: 1-Chlorooctane		93.9 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: o-Terphenyl		120 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc	

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N. AST @ 2'
5H17005-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

% Moisture	15.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	29.4	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M
>C12-C28	41.2	29.4	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M
>C28-C35	ND	29.4	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M
Surrogate: 1-Chlorooctane		91.9 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M
Surrogate: o-Terphenyl		117 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M
Total Petroleum Hydrocarbon C6-C35	41.2	29.4	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc

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SSW #1 @ 1'
5H17005-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00115	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Toluene	ND	0.00230	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Ethylbenzene	ND	0.00115	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (p/m)	ND	0.00230	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (o)	ND	0.00115	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		136 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		108 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	13.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	28.7	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C12-C28	169	28.7	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C28-C35	30.4	28.7	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: 1-Chlorooctane		91.7 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: o-Terphenyl		117 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	199	28.7	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc	

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Midland TX, 79705

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Project Manager: Joel Lowry

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S. Floor @ 4'
5H17005-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00103	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Toluene	ND	0.00206	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		135 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		113 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	3.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	25.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C12-C28	52.3	25.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: 1-Chlorooctane		91.7 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: o-Terphenyl		112 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	52.3	25.8	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

Permian Basin Environmental Lab, L.P.

10014 SCR 1213 Midland, TX 79706 432-686-7235

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

S. AST @ Surface
5H17005-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00116	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Toluene	ND	0.00233	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Ethylbenzene	ND	0.00116	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (p/m)	ND	0.00233	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Xylene (o)	ND	0.00116	mg/kg dry	1	P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		107 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		136 %	75-125		P5H1901	08/18/15	08/18/15	EPA 8021B	S-GC

General Chemistry Parameters by EPA / Standard Methods

% Moisture	14.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	29.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C12-C28	217	29.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
>C28-C35	47.5	29.1	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: 1-Chlorooctane		95.2 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Surrogate: o-Terphenyl		119 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	264	29.1	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc	

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Permian Basin Environmental Lab, L.P.

10014 SCR 1213 Midland, TX 79706 432-686-7235

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

S. AST @ 3'
5H17005-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

% Moisture	10.0	0.1	%	1	P5H1803	08/18/15	08/18/15	% calculation
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	27.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M
>C12-C28	ND	27.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M
>C28-C35	ND	27.8	mg/kg dry	1	P5H1902	08/18/15	08/18/15	TPH 8015M
Surrogate: 1-Chlorooctane		99.5 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M
Surrogate: o-Terphenyl		124 %	70-130		P5H1902	08/18/15	08/18/15	TPH 8015M
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	08/18/15	08/18/15	calc

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

Organics by GC - 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 P5H1901 - General Preparation (GC)										
Blank (P5H1901-BLK1)				Prepared & Analyzed: 08/18/15						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.0566		"	0.0500		113	75-125			
Surrogate: 4-Bromofluorobenzene	0.0632		"	0.0500		126	75-125			S-GC
LCS (P5H1901-BS1)				Prepared & Analyzed: 08/18/15						
Benzene	0.0806	0.00100	mg/kg wet				70-130			
Toluene	0.103	0.00200	"				70-130			
Ethylbenzene	0.118	0.00100	"				70-130			
Xylene (p/m)	0.222	0.00200	"				70-130			
Xylene (o)	0.112	0.00100	"				70-130			
Surrogate: 1,4-Difluorobenzene	0.0639		"	0.0500		128	75-125			S-09
Surrogate: 4-Bromofluorobenzene	0.0677		"	0.0500		135	75-125			S-09
LCS Dup (P5H1901-BSD1)				Prepared & Analyzed: 08/18/15						
Benzene	0.0804	0.00100	mg/kg wet				70-130		20	
Toluene	0.101	0.00200	"				70-130		20	
Ethylbenzene	0.118	0.00100	"				70-130		20	
Xylene (p/m)	0.222	0.00200	"				70-130		20	
Xylene (o)	0.113	0.00100	"				70-130		20	
Surrogate: 1,4-Difluorobenzene	0.0614		"	0.0500		123	75-125			
Surrogate: 4-Bromofluorobenzene	0.0684		"	0.0500		137	75-125			S-GC
Matrix Spike (P5H1901-MS1)				Source: 5H10001-01	Prepared & Analyzed: 08/18/15					
Benzene	0.0628	0.00109	mg/kg dry		ND		80-120			
Toluene	0.0861	0.00217	"		ND		80-120			
Ethylbenzene	0.109	0.00109	"		ND		80-120			
Xylene (p/m)	0.129	0.00217	"		ND		80-120			
Xylene (o)	0.0996	0.00109	"		ND		80-120			
Surrogate: 1,4-Difluorobenzene	0.0681		"	0.0543		125	75-125			
Surrogate: 4-Bromofluorobenzene	0.0616		"	0.0543		113	75-125			

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

Organics by GC - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P5H1901 - General Preparation (GC)

Matrix Spike Dup (P5H1901-MSD1)

Source: 5H10001-01

Prepared & Analyzed: 08/18/15

Benzene	0.0621	0.00109	mg/kg dry		ND		80-120		20	
Toluene	0.0837	0.00217	"		ND		80-120		20	
Ethylbenzene	0.102	0.00109	"		ND		80-120		20	
Xylene (p/m)	0.123	0.00217	"		ND		80-120		20	
Xylene (o)	0.0994	0.00109	"		ND		80-120		20	
Surrogate: 4-Bromofluorobenzene	0.0678		"	0.0543		125	75-125			
Surrogate: 1,4-Difluorobenzene	0.0662		"	0.0543		122	75-125			

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24 Smith Road, Ste. 261
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Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

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 P5H1803 - % Solids										
Blank (P5H1803-BLK1)				Prepared & Analyzed: 08/18/15						
% Moisture	ND	0.1	%							
Duplicate (P5H1803-DUP1)				Source: 5H17004-07		Prepared & Analyzed: 08/18/15				
% Moisture	15.0	0.1	%		15.0			0.00	20	
Duplicate (P5H1803-DUP2)				Source: 5H17005-06		Prepared & Analyzed: 08/18/15				
% Moisture	10.0	0.1	%		10.0			0.00	20	

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24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

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 P5H1902 - TX 1005										
Blank (P5H1902-BLK1)				Prepared & Analyzed: 08/18/15						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	99.1		"	100		99.1	70-130			
Surrogate: o-Terphenyl	59.7		"	50.0		119	70-130			
LCS (P5H1902-BS1)				Prepared & Analyzed: 08/18/15						
C6-C12	970	25.0	mg/kg wet	1000		97.0	75-125			
>C12-C28	1050	25.0	"	1000		105	75-125			
Surrogate: 1-Chlorooctane	92.4		"	100		92.4	70-130			
Surrogate: o-Terphenyl	53.3		"	50.0		107	70-130			
LCS Dup (P5H1902-BSD1)				Prepared & Analyzed: 08/18/15						
C6-C12	952	25.0	mg/kg wet	1000		95.2	75-125	1.88	20	
>C12-C28	1060	25.0	"	1000		106	75-125	1.01	20	
Surrogate: 1-Chlorooctane	92.9		"	100		92.9	70-130			
Surrogate: o-Terphenyl	54.4		"	50.0		109	70-130			
Duplicate (P5H1902-DUP1)		Source: 5H17004-10		Prepared & Analyzed: 08/18/15						
C6-C12	26.4	28.7	mg/kg dry		ND				20	
>C12-C28	ND	28.7	"		ND				20	
Surrogate: 1-Chlorooctane	104		"	115		90.7	70-130			
Surrogate: o-Terphenyl	65.9		"	57.5		115	70-130			

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

S-09 Surrogate recovery limits have been exceeded.

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

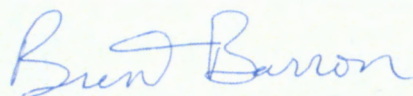
RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date:

8/21/2015

Brent Barron, Laboratory Director/Technical Director

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Order # 5417005

Pg 1 of 2

CHAIN OF CUSTODY RECORD

<h1 style="margin: 0;">Terracon</h1>				Laboratory: <u>Permian</u> Address: _____ Phone: _____ Contact: _____ PO/SO #: <u>Plains SRS (Pending)</u> Sampler's Signature: <u>Joel Lowry</u>				ANALYSIS REQUESTED				LAB USE ONLY DUE DATE:	
								<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> Project Manager: <u>Joel Lowry</u> Sampler's Name: <u>Joel Lowry</u> </div> <div style="width: 40%;"> Project Number: <u>AR157446</u> Project Name: <u>Lovington Station Tank</u> </div> </div>				TEMP OF COOLER WHEN RECEIVED (°C) <u>2.6</u>	
												Page 1 of 1	
								Lab Sample ID					

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers	4 oz Glass	TPH 0015	BTEX 0021	140d BTEX					
S	8/14/2015	12:05		X	WSW #1 @ 1'				1	X	X						01
S	8/14/2015	12:10		X	W. Floor @ 30"				1	X	X						02
S	8/14/2015	12:12		X	W. AST @ Surface				1	X	X						03
S	8/14/2015	12:15		X	W. AST @ 18"				1	X	X	X					04
S	8/14/2015	13:30		X	NSW #1 @ 1'				1	X	X						05
S	8/14/2015	13:35		X	N. Floor @ 3'				1	X	X						06
S	8/14/2015	13:38		X	N. AST @ Surface				1	X	X						07
S	8/14/2015	13:40		X	N. AST @ 2'				1	X	X	X					08
S	8/14/2015	13:45		X	SSW #1 @ 1'				1	X	X						09
S	8/14/2015	13:48		X	S. Floor @ 4'				1	X	X						10

TURNAROUND TIME: ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist: ☐ Yes ☐ No

Relinquished by (Signature): <u>Joel Lowry</u>	Date: <u>8/17/15</u>	Time: <u>17:07</u>	Received by (Signature): <u>KLB</u>	Date: <u>8-17-15</u>	Time: <u>15:25</u>	NOTES: Please Email Results to erin.loyd@terracon.com joel.loydy@terracon.com PIORESITX-LOWRY
Relinquished by (Signature): <u>Chris</u>	Date: <u>8/17/15</u>	Time: <u>15:25</u>	Received by (Signature):	Date:	Time:	
Relinquished by (Signature):	Date:	Time:	Received by (Signature):	Date:	Time:	
Relinquished by (Signature):	Date:	Time:	Received by (Signature):	Date:	Time:	

Matrix: WW-Wastewater, W-Water, S-Soil, L-Liquid, A-Air Bag, C-Charcoal tube, SL-Sludge
 Container: VOA-40 ml vial, A/G-Amber Glass 1L, 250 ml-Glass wide mouth, P/O-Plastic or other

Lubbock Office ■ 5827 50th Street ■ Lubbock, Texas 79424 ■ 806-300-0140

Responsive ■ Resourceful ■ Reliable

Pg 2072

CHAIN OF CUSTODY RECORD

ANALYSIS REQUESTED	
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LAB USE ONLY
DUE DATE:

TEMP OF COOLER WHEN RECEIVED (°C)	
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Page 1 of 1

Sampler's Signature

No.	Type of Containers
1	1000
2	1000
3	1000
4	1000
5	1000
6	1000
7	1000
8	1000
9	1000
10	1000
11	1000
12	1000
13	1000
14	1000
15	1000
16	1000
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91	1000
92	1000
93	1000
94	1000
95	1000
96	1000
97	1000
98	1000
99	1000
100	1000

Lovington Station ~~XXXX~~ Tank

Lab Sample ID

☐ No

NOTES:

NOTES.

[illegible]

1

1

1

2

1

[illegible]

NOTES: Please Email Results to
erin.loyd@terracon.com
joel.lowry@terracon.com

PIORESITX-LOWRY

Responsive ■ Resourceful ■ Reliable

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
10014 SCR 1213
Midland, TX 79706**

PBELAB

Analytical Report

Prepared for:

Joel Lowry
Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland, TX 79705

Project: Lovington Station Tank

Project Number: AR157446

Location: None Given

Lab Order Number: 5H20007



NELAP/TCEQ # T104704156-13-3

Report Date: 08/25/15

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
8/18 Stockpile	5H20007-01	Soil	08/18/15 18:12	08-19-2015 16:20

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

8/18 Stockpile

5H20007-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

Chloride	49.5	1.06	mg/kg dry	1	P5H2302	08/21/15	08/21/15	EPA 300.0	
% Moisture	6.0	0.1	%	1	P5H2106	08/21/15	08/21/15	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	172	26.6	mg/kg dry	1	P5H2404	08/21/15	08/22/15	TPH 8015M	
>C12-C28	1970	26.6	mg/kg dry	1	P5H2404	08/21/15	08/22/15	TPH 8015M	
>C28-C35	226	26.6	mg/kg dry	1	P5H2404	08/21/15	08/22/15	TPH 8015M	
Surrogate: 1-Chlorooctane		92.1 %	70-130		P5H2404	08/21/15	08/22/15	TPH 8015M	
Surrogate: o-Terphenyl		112 %	70-130		P5H2404	08/21/15	08/22/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	2370	26.6	mg/kg dry	1	[CALC]	08/21/15	08/22/15	calc	

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

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 P5H2106 - % Solids										
Blank (P5H2106-BLK1)				Prepared & Analyzed: 08/21/15						
% Moisture	ND	0.1	%							
Duplicate (P5H2106-DUP1)				Source: 5H20013-09		Prepared & Analyzed: 08/21/15				
% Moisture	1.0	0.1	%		1.0			0.00	20	
Duplicate (P5H2106-DUP2)				Source: 5H20013-16		Prepared & Analyzed: 08/21/15				
% Moisture	2.0	0.1	%		2.0			0.00	20	
Batch P5H2302 - *** DEFAULT PREP ***										
Blank (P5H2302-BLK1)				Prepared & Analyzed: 08/23/15						
Chloride	ND	1.00	mg/kg wet							
LCS (P5H2302-BS1)				Prepared & Analyzed: 08/21/15						
Chloride	104	1.00	mg/kg wet	100		104	80-120			
LCS Dup (P5H2302-BSD1)				Prepared & Analyzed: 08/21/15						
Chloride	105	1.00	mg/kg wet	100		105	80-120	0.957	20	
Duplicate (P5H2302-DUP1)				Source: 5H20004-02		Prepared & Analyzed: 08/21/15				
Chloride	265	1.03	mg/kg dry		23.2			168	20	
Duplicate (P5H2302-DUP2)				Source: 5H21008-05		Prepared & Analyzed: 08/21/15				
Chloride	ND	1.00	mg/kg wet		ND				20	
Matrix Spike (P5H2302-MS1)				Source: 5H20004-02		Prepared & Analyzed: 08/21/15				
Chloride	335	1.03	mg/kg dry	309	23.2	101	80-120			

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

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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
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Batch P5H2404 - TX 1005

Blank (P5H2404-BLK1)

Prepared: 08/21/15 Analyzed: 08/22/15

C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	102		"	100		102	70-130			
Surrogate: o-Terphenyl	63.2		"	50.0		126	70-130			

LCS (P5H2404-BS1)

Prepared: 08/21/15 Analyzed: 08/22/15

C6-C12	823	25.0	mg/kg wet	1000		82.3	75-125			
>C12-C28	903	25.0	"	1000		90.3	75-125			
Surrogate: 1-Chlorooctane	91.8		"	100		91.8	70-130			
Surrogate: o-Terphenyl	55.1		"	50.0		110	70-130			

LCS Dup (P5H2404-BSD1)

Prepared: 08/21/15 Analyzed: 08/22/15

C6-C12	790	25.0	mg/kg wet	1000		79.0	75-125	4.13	20	
>C12-C28	909	25.0	"	1000		90.9	75-125	0.692	20	
Surrogate: 1-Chlorooctane	91.1		"	100		91.1	70-130			
Surrogate: o-Terphenyl	55.2		"	50.0		110	70-130			

Matrix Spike (P5H2404-MS1)

Source: 5H20002-01

Prepared: 08/21/15 Analyzed: 08/22/15

C6-C12	860	26.9	mg/kg dry	1080	24.2	77.7	75-125			
>C12-C28	945	26.9	"	1080	ND	87.9	75-125			
Surrogate: 1-Chlorooctane	95.7		"	108		89.0	70-130			
Surrogate: o-Terphenyl	57.9		"	53.8		108	70-130			

Matrix Spike Dup (P5H2404-MSD1)

Source: 5H20002-01

Prepared: 08/21/15 Analyzed: 08/22/15

C6-C12	840	26.9	mg/kg dry	1080	24.2	75.8	75-125	2.44	20	
>C12-C28	974	26.9	"	1080	ND	90.6	75-125	3.00	20	
Surrogate: 1-Chlorooctane	97.8		"	108		91.0	70-130			
Surrogate: o-Terphenyl	63.4		"	53.8		118	70-130			

Terracon Consulting, Inc.
24 Smith Road, Ste. 261
Midland TX, 79705


Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

Notes and Definitions

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:



Date:

8/25/2015

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
10014 SCR 1213
Midland, TX 79706**



Analytical Report

Prepared for:

Joel Lowry
Terracon Consulting, Inc.
10400 State Highway 191
Midland, TX 79707

Project: Lovington Station Tank

Project Number: AR157446

Location: New Mexico

Lab Order Number: 5104001



NELAP/TCEQ # T104704156-13-3

Report Date: 09/18/15

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
E. AST @ Surface	5I04001-01	Soil	09/02/15 16:00	09-03-2015 17:55
E. Floor @ 2'	5I04001-02	Soil	09/02/15 16:05	09-03-2015 17:55
ESW # 1 @ 1'	5I04001-03	Soil	09/02/15 16:10	09-03-2015 17:55
RP @ 18"	5I04001-04	Soil	09/02/15 16:15	09-03-2015 17:55
East RP @ Surface	5I04001-05	Soil	09/02/15 16:20	09-03-2015 17:55

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

E. AST @ Surface
5I04001-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00122	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Toluene	ND	0.00244	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Ethylbenzene	ND	0.00122	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Xylene (p/m)	0.00601	0.00244	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Xylene (o)	ND	0.00122	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		132 %	75-125		P5I1502	09/09/15	09/09/15	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		108 %	75-125		P5I1502	09/09/15	09/09/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	18.0	0.1	%	1	P5I0801	09/08/15	09/08/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	88.5	30.5	mg/kg dry	1	P5I1003	09/08/15	09/08/15	TPH 8015M	
>C12-C28	538	30.5	mg/kg dry	1	P5I1003	09/08/15	09/08/15	TPH 8015M	
>C28-C35	79.0	30.5	mg/kg dry	1	P5I1003	09/08/15	09/08/15	TPH 8015M	
Surrogate: 1-Chlorooctane		107 %	70-130		P5I1003	09/08/15	09/08/15	TPH 8015M	
Surrogate: o-Terphenyl		127 %	70-130		P5I1003	09/08/15	09/08/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	706	30.5	mg/kg dry	1	[CALC]	09/08/15	09/08/15	calc	

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

E. Floor @ 2'
5104001-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00115	mg/kg dry	1	P5I1102	09/08/15	09/08/15	EPA 8021B	
Toluene	ND	0.00230	mg/kg dry	1	P5I1102	09/08/15	09/08/15	EPA 8021B	
Ethylbenzene	ND	0.00115	mg/kg dry	1	P5I1102	09/08/15	09/08/15	EPA 8021B	
Xylene (p/m)	ND	0.00230	mg/kg dry	1	P5I1102	09/08/15	09/08/15	EPA 8021B	
Xylene (o)	ND	0.00115	mg/kg dry	1	P5I1102	09/08/15	09/08/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		110 %	75-125		P5I1102	09/08/15	09/08/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		123 %	75-125		P5I1102	09/08/15	09/08/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	11.1	1.15	mg/kg dry	1	P5I1705	09/15/15	09/17/15	EPA 300.0	
% Moisture	13.0	0.1	%	1	P5I0801	09/08/15	09/08/15	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	28.7	mg/kg dry	1	P5I1003	09/08/15	09/08/15	TPH 8015M	
>C12-C28	ND	28.7	mg/kg dry	1	P5I1003	09/08/15	09/08/15	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P5I1003	09/08/15	09/08/15	TPH 8015M	
Surrogate: 1-Chlorooctane		102 %	70-130		P5I1003	09/08/15	09/08/15	TPH 8015M	
Surrogate: o-Terphenyl		126 %	70-130		P5I1003	09/08/15	09/08/15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.7	mg/kg dry	1	[CALC]	09/08/15	09/08/15	calc	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

Permian Basin Environmental Lab, L.P.

10014 SCR 1213 Midland, TX 79706 432-686-7235

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

ESW # 1 @ 1'
5104001-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00116	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Toluene	ND	0.00233	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Ethylbenzene	ND	0.00116	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Xylene (p/m)	ND	0.00233	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Xylene (o)	ND	0.00116	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		114 %	75-125		P5I1502	09/09/15	09/09/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		123 %	75-125		P5I1502	09/09/15	09/09/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	14.0	0.1	%	1	P5I0801	09/08/15	09/08/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	29.1	mg/kg dry	1	P5I1004	09/08/15	09/10/15	TPH 8015M	
>C12-C28	188	29.1	mg/kg dry	1	P5I1004	09/08/15	09/10/15	TPH 8015M	
>C28-C35	50.6	29.1	mg/kg dry	1	P5I1004	09/08/15	09/10/15	TPH 8015M	
Surrogate: 1-Chlorooctane		113 %	70-130		P5I1004	09/08/15	09/10/15	TPH 8015M	
Surrogate: o-Terphenyl		143 %	70-130		P5I1004	09/08/15	09/10/15	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	238	29.1	mg/kg dry	1	[CALC]	09/08/15	09/10/15	calc	

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

RP @ 18"
5I04001-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	0.00342	0.00123	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Toluene	0.00410	0.00247	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Ethylbenzene	0.00198	0.00123	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Xylene (p/m)	0.0144	0.00247	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Xylene (o)	ND	0.00123	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		97.1 %	75-125		P5I1502	09/09/15	09/09/15	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		121 %	75-125		P5I1502	09/09/15	09/09/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	19.0	0.1	%	1	P5I0801	09/08/15	09/08/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	30.9	mg/kg dry	1	P5I1004	09/08/15	09/09/15	TPH 8015M	
>C12-C28	ND	30.9	mg/kg dry	1	P5I1004	09/08/15	09/09/15	TPH 8015M	
>C28-C35	ND	30.9	mg/kg dry	1	P5I1004	09/08/15	09/09/15	TPH 8015M	
<i>Surrogate: 1-Chlorooctane</i>		100 %	70-130		P5I1004	09/08/15	09/09/15	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		135 %	70-130		P5I1004	09/08/15	09/09/15	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	ND	30.9	mg/kg dry	1	[CALC]	09/08/15	09/09/15	calc	

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

East RP @ Surface
5104001-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	0.00501	0.00122	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Toluene	0.0552	0.00244	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Ethylbenzene	0.0562	0.00122	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Xylene (p/m)	0.225	0.00244	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
Xylene (o)	0.0791	0.00122	mg/kg dry	1	P5I1502	09/09/15	09/09/15	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		98.0 %	75-125		P5I1502	09/09/15	09/09/15	EPA 8021B	S-GC
<i>Surrogate: 1,4-Difluorobenzene</i>		90.6 %	75-125		P5I1502	09/09/15	09/09/15	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

% Moisture	8.0	0.1	%	1	P5I0801	09/08/15	09/08/15	% calculation	
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	1680	152	mg/kg dry	5	P5I1004	09/08/15	09/09/15	TPH 8015M	
>C12-C28	13700	152	mg/kg dry	5	P5I1004	09/08/15	09/09/15	TPH 8015M	
>C28-C35	1600	152	mg/kg dry	5	P5I1004	09/08/15	09/09/15	TPH 8015M	
<i>Surrogate: 1-Chlorooctane</i>		99.5 %	70-130		P5I1004	09/08/15	09/09/15	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		174 %	70-130		P5I1004	09/08/15	09/09/15	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	16900	152	mg/kg dry	5	[CALC]	09/08/15	09/09/15	calc	

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

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Organics by GC - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch PSI1102 - General Preparation (GC)

Blank (PSI1102-BLK1)

Prepared & Analyzed: 09/08/15

Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.0520		"	0.0500		104	75-125			
Surrogate: 4-Bromofluorobenzene	0.0654		"	0.0500		131	75-125			S-GC

LCS (PSI1102-BS1)

Prepared & Analyzed: 09/08/15

Benzene	0.0721	0.00100	mg/kg wet	0.0900		80.1	70-130			
Toluene	0.0966	0.00200	"	0.0900		107	70-130			
Ethylbenzene	0.113	0.00100	"	0.0900		126	70-130			
Xylene (p/m)	0.220	0.00200	"	0.180		122	70-130			
Xylene (o)	0.108	0.00100	"	0.0900		120	70-130			
Surrogate: 1,4-Difluorobenzene	0.0581		"	0.0500		116	75-125			
Surrogate: 4-Bromofluorobenzene	0.0638		"	0.0500		128	75-125			S-GC

LCS Dup (PSI1102-BSD1)

Prepared & Analyzed: 09/08/15

Benzene	0.0726	0.00100	mg/kg wet	0.0900		80.6	70-130	0.622	20	
Toluene	0.0998	0.00200	"	0.0900		111	70-130	3.29	20	
Ethylbenzene	0.116	0.00100	"	0.0900		129	70-130	2.56	20	
Xylene (p/m)	0.221	0.00200	"	0.180		123	70-130	0.250	20	
Xylene (o)	0.111	0.00100	"	0.0900		124	70-130	3.12	20	
Surrogate: 1,4-Difluorobenzene	0.0595		"	0.0500		119	75-125			
Surrogate: 4-Bromofluorobenzene	0.0661		"	0.0500		132	75-125			S-GC

Batch PSI1502 - General Preparation (GC)

Blank (PSI1502-BLK1)

Prepared & Analyzed: 09/09/15

Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.0648		"	0.0500		130	75-125			S-GC
Surrogate: 1,4-Difluorobenzene	0.0539		"	0.0500		108	75-125			

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

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Organics by GC - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P5I1502 - General Preparation (GC)

LCS (P5I1502-BS1)

Prepared & Analyzed: 09/09/15

Benzene	0.0808	0.00100	mg/kg wet	0.100		80.8	70-130			
Toluene	0.109	0.00200	"	0.100		109	70-130			
Ethylbenzene	0.110	0.00100	"	0.100		110	70-130			
Xylene (p/m)	0.232	0.00200	"	0.200		116	70-130			
Xylene (o)	0.122	0.00100	"	0.100		122	70-130			
Surrogate: 1,4-Difluorobenzene	0.0610		"	0.0500		122	75-125			
Surrogate: 4-Bromofluorobenzene	0.0701		"	0.0500		140	75-125			S-GC

LCS Dup (P5I1502-BSD1)

Prepared & Analyzed: 09/09/15

Benzene	0.0803	0.00100	mg/kg wet	0.100		80.3	70-130	0.670	20	
Toluene	0.110	0.00200	"	0.100		110	70-130	0.942	20	
Ethylbenzene	0.111	0.00100	"	0.100		111	70-130	1.20	20	
Xylene (p/m)	0.227	0.00200	"	0.200		113	70-130	2.46	20	
Xylene (o)	0.120	0.00100	"	0.100		120	70-130	0.984	20	
Surrogate: 4-Bromofluorobenzene	0.0712		"	0.0500		142	75-125			S-GC
Surrogate: 1,4-Difluorobenzene	0.0619		"	0.0500		124	75-125			

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
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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 P5I0801 - % Solids										
Blank (P5I0801-BLK1)				Prepared & Analyzed: 09/08/15						
% Moisture	ND	0.1	%							
Duplicate (P5I0801-DUP1)				Source: 5I03011-01		Prepared & Analyzed: 09/08/15				
% Moisture	ND	0.1	%		0.0				20	
Duplicate (P5I0801-DUP2)				Source: 5I04001-01		Prepared & Analyzed: 09/08/15				
% Moisture	17.0	0.1	%		18.0			5.71	20	
Batch P5I1705 - *** DEFAULT PREP ***										
Blank (P5I1705-BLK1)				Prepared: 09/15/15 Analyzed: 09/17/15						
Chloride	ND	1.00	mg/kg wet							
LCS (P5I1705-BS1)				Prepared: 09/15/15 Analyzed: 09/17/15						
Chloride	98.5	1.00	mg/kg wet	100		98.5	80-120			
LCS Dup (P5I1705-BSD1)				Prepared: 09/15/15 Analyzed: 09/17/15						
Chloride	99.3	1.00	mg/kg wet	100		99.3	80-120	0.809	20	
Duplicate (P5I1705-DUP1)				Source: 5I09001-41		Prepared: 09/15/15 Analyzed: 09/17/15				
Chloride	1.80	1.08	mg/kg dry		1.52			16.9	20	
Duplicate (P5I1705-DUP2)				Source: 5I11001-05		Prepared: 09/15/15 Analyzed: 09/17/15				
Chloride	ND	1.09	mg/kg dry		ND				20	
Matrix Spike (P5I1705-MS2)				Source: 5I09001-41		Prepared: 09/15/15 Analyzed: 09/17/15				
Chloride	112	1.08	mg/kg dry	134	1.52	81.9	80-120			

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Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

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 P5I1003 - TX 1005										
Blank (P5I1003-BLK1)				Prepared & Analyzed: 09/08/15						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	116		"	100		116	70-130			
Surrogate: o-Terphenyl	72.6		"	50.0		145	70-130			S-GC
LCS (P5I1003-BS1)				Prepared & Analyzed: 09/08/15						
C6-C12	952	25.0	mg/kg wet	1000		95.2	75-125			
>C12-C28	968	25.0	"	1000		96.8	75-125			
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	67.3		"	50.0		135	70-130			S-GC
LCS Dup (P5I1003-BSD1)				Prepared & Analyzed: 09/08/15						
C6-C12	924	25.0	mg/kg wet	1000		92.4	75-125	2.98	20	
>C12-C28	955	25.0	"	1000		95.5	75-125	1.31	20	
Surrogate: 1-Chlorooctane	108		"	100		108	70-130			
Surrogate: o-Terphenyl	72.2		"	50.0		144	70-130			S-GC
Matrix Spike (P5I1003-MS1)				Source: 5I03012-01	Prepared & Analyzed: 09/08/15					
C6-C12	970	28.7	mg/kg dry	1150	ND	84.4	75-125			
>C12-C28	1070	28.7	"	1150	34.3	90.4	75-125			
Surrogate: 1-Chlorooctane	118		"	115		103	70-130			
Surrogate: o-Terphenyl	73.7		"	57.5		128	70-130			
Matrix Spike Dup (P5I1003-MSD1)				Source: 5I03012-01	Prepared & Analyzed: 09/08/15					
C6-C12	953	28.7	mg/kg dry	1150	ND	82.9	75-125	1.70	20	
>C12-C28	1030	28.7	"	1150	34.3	87.1	75-125	3.78	20	
Surrogate: 1-Chlorooctane	118		"	115		103	70-130			
Surrogate: o-Terphenyl	71.8		"	57.5		125	70-130			

Terracon Consulting, Inc.
10400 State Highway 191
Midland TX, 79707

Project: Lovington Station Tank
Project Number: AR157446
Project Manager: Joel Lowry

Fax: (432) 684-9608

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 P5I1004 - TX 1005										
Blank (P5I1004-BLK1)				Prepared & Analyzed: 09/08/15						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	124		"	100		124	70-130			
Surrogate: o-Terphenyl	78.8		"	50.0		158	70-130			S-GC
LCS (P5I1004-BS1)				Prepared & Analyzed: 09/08/15						
C6-C12	911	25.0	mg/kg wet	1000		91.1	75-125			
>C12-C28	1000	25.0	"	1000		100	75-125			
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	67.9		"	50.0		136	70-130			S-GC
LCS Dup (P5I1004-BSD1)				Prepared & Analyzed: 09/08/15						
C6-C12	912	25.0	mg/kg wet	1000		91.2	75-125	0.128	20	
>C12-C28	1000	25.0	"	1000		100	75-125	0.0240	20	
Surrogate: 1-Chlorooctane	110		"	100		110	70-130			
Surrogate: o-Terphenyl	67.8		"	50.0		136	70-130			S-GC
Matrix Spike (P5I1004-MS1)				Source: 5I08011-01	Prepared: 09/08/15 Analyzed: 09/09/15					
C6-C12	933	27.2	mg/kg dry	1090	ND	85.8	75-125			
>C12-C28	1160	27.2	"	1090	593	51.9	75-125			
Surrogate: 1-Chlorooctane	119		"	109		109	70-130			
Surrogate: o-Terphenyl	72.8		"	54.3		134	70-130			S-GC
Matrix Spike Dup (P5I1004-MSD1)				Source: 5I08011-01	Prepared: 09/08/15 Analyzed: 09/09/15					
C6-C12	951	27.2	mg/kg dry	1090	ND	87.5	75-125	1.92	20	
>C12-C28	1180	27.2	"	1090	593	53.8	75-125	3.53	20	
Surrogate: 1-Chlorooctane	122		"	109		112	70-130			
Surrogate: o-Terphenyl	74.9		"	54.3		138	70-130			S-GC

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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.

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:



Date:

9/18/2015

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Remediation Summary and Risk-Based Closure Report

Lovington Station Tank 11275 ■ Lea County, New Mexico

Plains SRS 2015-162 ■ Terracon Project No. AR157446



APPENDIX D

Photographs

Remediation Summary and Risk-Based Closure Report

Lovington Station Tank 11275 ■ Lea County, New Mexico

Plains SRS 2015-162 ■ Terracon Project No. AR157446

Terracon



Photo 1: View of hydrocarbon staining from the initial release, facing northwest. (32.73434, -103.35261)



Photo 2: View of hydrocarbon staining from the initial release, facing northwest. (32.73433, -103.35267)



Photo 3: View excavation activities, facing north. (32.73428, -103.35272)



Photo 4: View excavated area, facing northwest. (32.73429, -103.35254)



Photo 5: View sample location at release point, facing west. (32.73438, -103.35263)



Photo 6: View of the release site after remediation activities, facing north. (32.73429, -103.35258)



Photo 7: View of the release site after remediation activities, facing north. (32.73429, -103.35275)



Photo 8: View of the release site after remediation activities, facing east. (32.73454, -103.35276)

Remediation Summary and Risk-Based Closure Report

Lovington Station Tank 11275 ■ Lea County, New Mexico

Plains SRS 2015-162 ■ Terracon Project No. AR157446



APPENDIX E

**Release Notification and Corrective Action
(NMOCD Form C-141)**

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Marketing, LP	Contact	Camille Bryant
Address	2530 State Hwy. 214, Denver City, TX 79323	Telephone No.	(575) 441-1099
Facility Name	Lovington Station Tank 117275	Facility Type	Tank
Surface Owner	New Mexico State Land Office	Mineral Owner	
		Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	21	18S	36E					Lea

Latitude N 32.73427° Longitude W 103.35266°

NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	101 bbls	Volume Recovered	66 bbls
Source of Release	Tank	Date and Hour of Occurrence	08/05/2015 @ 08:00	Date and Hour of Discovery	08/05/2015 @ 08:22
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Verbal notification to Kellie Jones		
By Whom?	Camille Bryant	Date and Hour	08/05/2015 @ 15:28		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

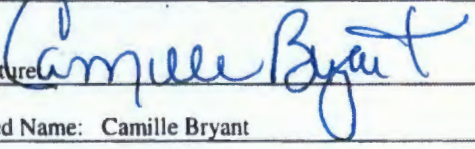

RECEIVED

By OCD District 1 at 2:57 pm, Aug 07, 2015

Describe Cause of Problem and Remedial Action Taken.* Internal corrosion caused a hole to develop in the floor of tank 117275 resulting in a release of crude oil.

Describe Area Affected and Cleanup Action Taken. The released crude oil impacted an area inside the secondary containment measuring approximately 40' X 80'. The impacted area will be remediated as per applicable NMOCD guidelines.

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

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Camille Bryant	Approved by District Supervisor: 		
Title: Remediation Coordinator	Approval Date: 08/07/2015	Expiration Date: 10/07/2015	
E-mail Address: cjbryant@paalp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 8/7/15	Site samples required. Delineate and remediate as per MNOCD guides. Geotag photographs of remediation required.		1RP-3791
Phone: (575) 441-1099			

* Attach Additional Sheets If Necessary

nKJ1521954222

pKJ1521954545