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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Plains Pipeline, LP	Contact: Camille Bryant
Address: 2530 State Hwy 214, Denver City, TX 79323	Telephone No.: (575) 441-1099
Facility Name: Jal Tank Farm Tank Booster 1287	Facility Type: Pump

Surface Owner: Plains Pipeline, L.P.	Mineral Owner	API No.30-025-12803

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	32	25S	37E					Lea

Latitude N 32.08076° **Longitude** W 103.17807°

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 10 bbls	Volume Recovered: 0 bbls
Source of Release: Pump	Date and Hour of Occurrence: 2/21/2015 @ 1030	Date and Hour of Discovery 2/21/2015 @ 1030
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Verbal notification to Bill Sonnamaker (Voicemail)	
By Whom? Camille Bryant	Date and Hour 2/21/2015 @ 1300	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

HOBBS OCD
OCT 20 2015
RECEIVED

If a Watercourse was Impacted, Describe Fully.*

APPROVED
By Kellie Jones at 3:20 pm, Oct 22, 2015

Describe Cause of Problem and Remedial Action Taken.* The pump driver on (electric motor) bearings failed which transferred misalignment, heat, and vibration to the pump and mechanical seal assembly and caused subsequent seal failure. Failure of the mechanical seal allowed crude oil to escape and ignite. The release was confined inside the firewall at the facility. The fire was extinguished and the seal, motor, and pipe was replaced.

Describe Area Affected and Cleanup Action Taken.*
The area of impact was excavated and soil samples were collected from the floor and/or sidewalls of the excavation. Soil samples were submitted to the laboratory and analyzed for concentrations of BTEX and TPH. In addition, select samples were analyzed for concentrations of chloride. Excavated soil was remediated in an on-site treatment cell and utilized as backfill with NMOCD approval. Please reference the "Remediation Summary and Site Closure Request" dated October 2015 for additional 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: Camille Bryant	OIL CONSERVATION DIVISION
Printed Name: Camille Bryant	Approved by Environmental Specialist:
Title: Remediation Coordinator	Approval Date: 10/22/2015 Expiration Date: //
E-mail Address: cjbryant@paalp.com	Conditions of Approval: // Attached ☐ 1RP 3570
Date: 10/20/15 Phone: (575) 441-1099	

* Attach Additional Sheets If Necessary

RECEIVED
By Kellie Jones at 3:20 pm, Oct 22, 2015

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 Pipeline LP	Contact	Camille Bryant
Address	2530 State Hwy. 214, Denver City, TX 79323	Telephone No.	(575) 441-1099
Facility Name	Jal Tank Farm Tank Booster 1287	Facility Type	Pump

Surface Owner Plains Pipeline, LP	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
P	32	25S	37E					Lea

Latitude N 32.08076° Longitude W 103.17807°

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 10 bbls	Volume Recovered 0 bbls
Source of Release Pump	Date and Hour of Occurrence 02/21/2015 @ 10:30	Date and Hour of Discovery 02/21/2015 @ 10:30
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Verbal notification to Bill Sonnamaker (voicemail)	
By Whom? Camille Bryant	Date and Hour 02/21/2015 @ 13:00	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By OCD; Dr. Oberding at 9:46 am, Mar 11, 2015

Describe Cause of Problem and Remedial Action Taken.* The pump driver on (electric motor) bearings failed which transferred misalignment, heat, and vibration to the pump and mechanical seal assembly and caused subsequent seal failure. Failure of the mechanical seal allowed crude oil to escape and ignite. The release was confined inside the firewall at the facility. The fire was extinguished and the seal, motor and pipe was replaced.

Describe Area Affected and Cleanup Action Taken. The released crude oil was contained inside the firewall of the facility. 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: Camille Bryant	OIL CONSERVATION DIVISION
Printed Name: Camille Bryant	Approved by ~~District Supervisor~~:
Title: Remediation Coordinator	Approval Date: 03/11/2015 Expiration Date: 06/11/2015
E-mail Address: cjbryant@paalp.com	Conditions of Approval: Site samples required. Delineate and remediate area as per NMOCD guides. Attached ☐
Date: 3/10/15 Phone: (575) 441-1099	1RP-3570 34053

* Attach Additional Sheets If Necessary

nTO1508239951

fTO1508239710

pTO1508240264

Stanley, Curtis D.

From: Camille J Bryant <CJBryant@paalp.com>
Sent: Thursday, June 18, 2015 10:44 AM
To: Stanley, Curtis D.
Subject: Fwd: Plains Jal Tank Farm Booster 1287 1R-3570

Sent from my iPhone

Begin forwarded message:

> **From:** "Oberding, Tomas, EMNRD" <Tomas.Oberding@state.nm.us>
> **Date:** June 18, 2015 at 9:09:53 AM MDT
> **To:** Camille J Bryant <CJBryant@paalp.com>
> **Subject: RE: Plains Jal Tank Farm Booster 1287 1R-3570**
>
> Good morning Camille!
> Thank you for the update.
> OCD approves the backfill.
> Be safe out there please.
> Cheers
> -Tomas
>
> Tomáš 'Doc' Oberding PhD
> Hydrologist, Adv-District 1
> Oil Conservation Division, EMNRD
> (505) 476-3403
> E-Mail: tomas.oberding@state.nm.us
> 一期一会
> OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.
>
> Please note:
> -The OCD is no longer granting "risk-based," or standard closure of events/RPs with remediation deferred to site abandonment/sale/closure. The RP will remain open until such time as historic contamination is addressed.
> -Geotagged photographic documentation is stipulated for all events involving liquids.
>
> If you have any questions or concerns, and for notification, please contact me.
>
> ---
>
> **From:** Camille J Bryant [mailto:CJBryant@paalp.com]
> **Sent:** Thursday, June 18, 2015 7:51 AM
> **To:** Oberding, Tomas, EMNRD
> **Subject:** Plains Jal Tank Farm Booster 1287 1R-3570
>
> Good Morning Tomas,

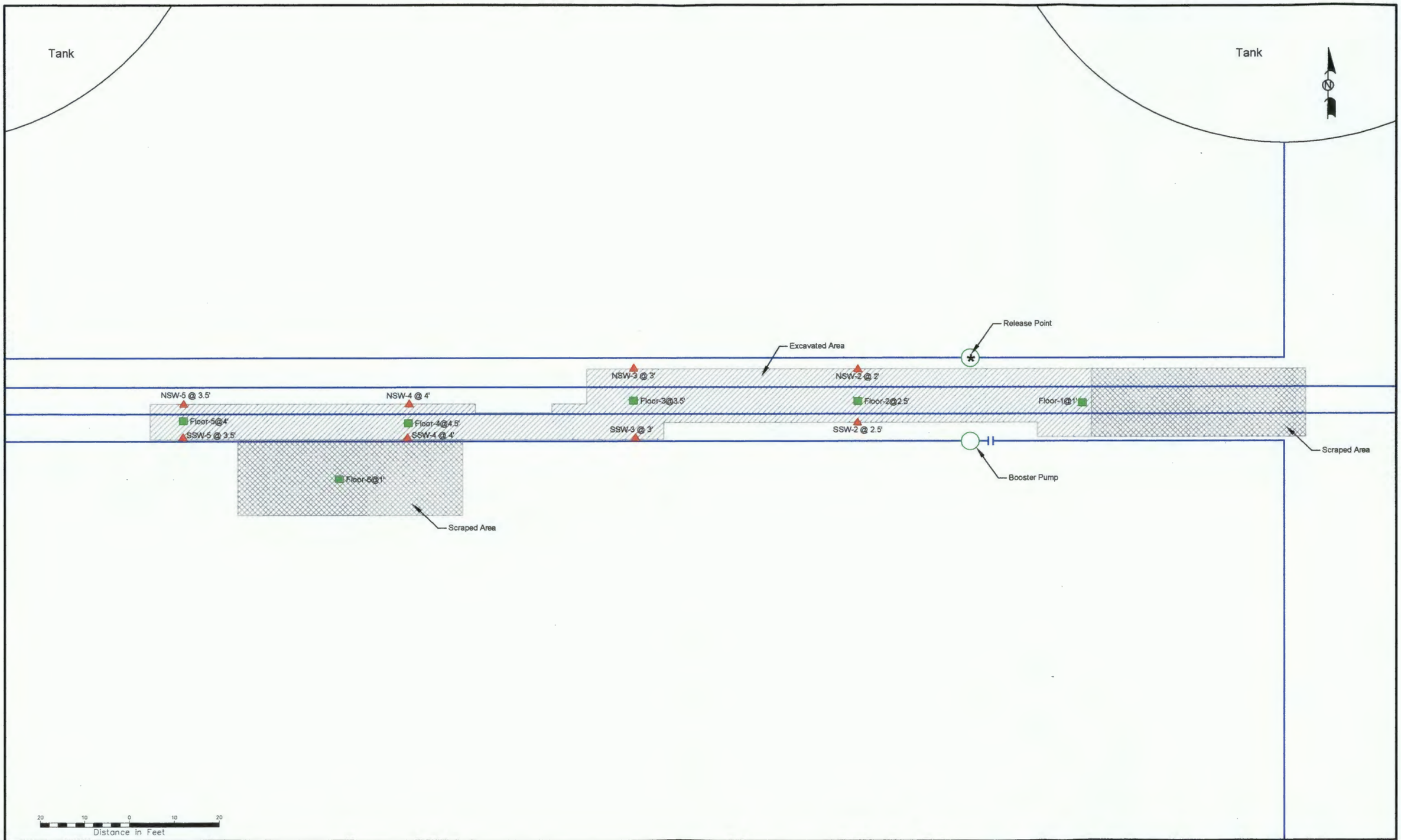
Please find attached the Soil Chemistry Table for the Plains Jal Tank Farm Booster 1287 Release Site 1R-3570. As per our discussion, Plains respectfully requests NMOCD approval to backfill the excavated area with the remediated stockpiled soil. Please contact me with any questions.

Respectfully,

Camille J. Bryant
Remediation Coordinator
Plains All American
2530 State Highway 214
Denver City, Texas 79323
Office: 806.592.2555
Cell: 575.441.1099
Fax: 806.592.7479
Email: cjbryant@paalp.com

Attention:
The information contained in this message and/or attachments is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. If you received this in error, please contact the Plains Service Desk at 713-646-4444 and delete the material from any system and destroy any copies.

This footnote also confirms that this email message has been scanned for Viruses and Content and cleared.



LEGEND:

- Sidewall Soil Sample Location
- Floor Soil Sample Location
- Above Ground Piping
- Booster Pump

Figure 2
Site Details & Confirmation Soil Sample Locations
Plains Pipeline LP.
Jal Tank Farm Booster 1287
Lea County, NM

Scale: 1" = 20'
CAD By: TA
Checked By: CS
Date: April 15, 2015
Lat. N 32.080650°, Long. W 103.178036°
SW1/4 SW1/4 Sec 32 T25S R37E

TRC
2057 Commerce Drive
Midland, Texas 79703
432.520.7720

REMEDIATION SUMMARY AND SITE CLOSURE REQUEST

JAL TANK FARM TANK BOOSTER 1287
UNIT LETTER "P", SECTION 32, TOWNSHIP 25 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
SRS #: 2015-044
NMOCD Reference: 1RP-3570

Prepared for:

Plains Pipeline, L.P.
333 Clay Street, Suite 1600
Houston, Texas 77002

Prepared by:

TRC Environmental Corporation
2057 Commerce Drive
Midland, Texas 79703

October 2015

Curt D. Stanley
Senior Project Manager

Brittan K. Byerly, P.G.
Managing Principal

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FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION AND BACKGROUND

On behalf of Plains Pipeline, L.P. (Plains), TRC Environmental Corporation (TRC) has prepared this Remediation Summary and Site Closure Request for the crude oil release site known as Jal Tank Farm Tank Booster 1287 (SRS: 2015-044). The Release Site is located approximately three (3) miles south of Jal, New Mexico, in Unit Letter "P", Section 32, Township 25 South, Range 37 East. A topographic location map and site map depicting the soil sample locations are provided as Figures 1 and 2, respectively. The Release Site is located on property owned by Plains All American Pipeline (Plains). On February 21, 2015, bearings on a pump driver (electric motor) failed, which resulted in the misalignment and vibration of the pump assembly. These factors, along with the resulting heat generated, caused the failure of the mechanical seal assembly. The failure of the mechanical seal allowed crude oil to be released and ignite. The release was confined inside the secondary containment of the facility. Approximately ten (10) bbls of crude oil was released and none was recovered during the initial response activities, resulting in a net loss of approximately ten (10) bbls of crude oil. An area of impact measuring approximately six (6) to twenty-five (25) feet in width and two hundred fifty (250) feet in length was observed on the ground surface. Site photographs are provided as Appendix A. The Release Notification and Corrective Action (Form C-141) is included as Appendix C.

2.0 NMOCD SITE CLASSIFICATION

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 32, Township 25 South, Range 37 East. An inferred depth of groundwater reference map utilized by The New Mexico Oil Conservation Division (NMOCD) indicates groundwater should be encountered at approximately one hundred ten (110) feet below ground surface (bgs). Shell Pipeline Company, LP (Shell) has installed monitor wells in Unit Letter P, Section 32, Township 25 South, Range 37 East and groundwater elevation data indicates groundwater was encountered at approximately eighty-five (85) feet bgs. Based on the NMOCD site classification system and utilizing Shell groundwater elevation date, 10 points will be assigned to the Release Site ranking as a result of this criterion.

There are no registered water wells located within 1,000 feet of the Release Site. Based on the NMOCD Site Classification System, no points will be assigned to the Release Site ranking as a result of this criterion.

There are no surface-water features located within a 1,000 foot radius of the site. Based on the NMOCD Site Classification System, no points would be assigned to the site as a result of this criterion. The NMOCD guidelines indicate the Site has a Ranking Score of ten (10) points. The regulatory guidelines for a Release Site with a Ranking Score of ten (10) points are as follows:

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

3.0 SUMMARY OF FIELD ACTIVITIES

On March 12, 2015, remediation activities commenced at the Release Site. Impacted soil was hand excavated near and under the aboveground pipeline and a backhoe was utilized in open areas. The completed excavation measured approximately six (6) feet to twenty-five (25) feet in width, two-hundred fifty seven (257) feet in length and approximately six (6) inches to four and one half (4.5) feet in depth. Impacted soil was stockpiled on plastic to the south of the excavation outside of the secondary containment wall.

On March 31, 2015, eight (8) sidewall soil samples (NSW-2 @ 2', SSW-2 @ 2.5', NSW-3 @ 3', SSW-3 @ 3', NSW-4 @ 4', SSW-4 @ 4', NSW-5 @ 3.5', and SSW-5 @ 3.5') were collected and submitted to the laboratory for analysis of concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX) using Method SW-846 8021B and total petroleum hydrocarbon (TPH) using Method SW 846-8015M. The analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory method detection limit (MDL) for all submitted soil samples. TPH concentrations were less than the laboratory method detection limit (MDL) for all soil samples, with the exception of soil sample NSW-2 @ 2' which exhibited TPH concentration of 113.2 mg/Kg. Please reference Figure 2 for soil sample locations. A table summarizing Concentrations BTEX, TPH, and Chloride in Soil is provided as Table 1. Laboratory Analytical Reports are provided as Appendix B.

On March 31, 2015, six (6) excavation floor soil samples (Floor-1 @ 1', Floor-2 @ 2.5', Floor-3 @ 3.5', Floor-4 @ 4.5', Floor-5 @ 4', and Floor-6 @ 1') were collected and submitted to the laboratory for BTEX and TPH analysis. The analytical results indicated benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL for all submitted soil samples. In addition, soil sample Floor-1 @ 1' was analyzed for concentrations of chloride. The analytical results indicated the chloride concentration for soil sample Floor-1 @ 1' was 4.33 mg/Kg. Please reference Figure 2 for soil sample locations.

Based on the analytical results of the March 31, 2015 soil sampling event, no additional excavation was warranted.

Plains opted to remediate the impacted soil stockpile by blending and mixing the impacted soil and placing the soil in an on-site treatment cell augmented with high nitrogen fertilizer to expedite the bioremediation of the impacted soil. A total of approximately 508 cubic yards (cy) of impacted soil was excavated from the Release Site and treated in the treatment cell.

On May 15, 2015, one (1) – five (5) point composite soil sample (SP-1) was collected from the on-site treatment cell and submitted to the laboratory for analysis. The analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL and the TPH concentration was 281.925 mg/Kg. Based on the analytical results, the remediated soil within the treatment cell was deemed suitable for use as backfill.

On June 18, 2015, Plains requested and received permission from the NMOCD, to backfill the excavation with the remediated soil stockpiled south of the excavation outside of the secondary containment wall.

From July 7, 2015 through July 17, 2015, excavation backfilling activities were conducted.

4.0 SITE CLOSURE REQUEST

TRC recommends Plains provide the NMOCD a copy of this Remediation Summary and Site Closure Request and request the NMOCD grant site closure status to the Jal Tank Farm Tank Booster 1287 release of February 21, 2015.

5.0 LIMITATIONS

TRC Environmental Corporation has prepared this Remediation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

TRC Environmental Corporation has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. TRC Environmental Corporation has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. TRC Environmental Corporation has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. TRC Environmental Corporation also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Pipeline, L.P. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of TRC Environmental Corporation. and/or Plains Pipeline L.P.

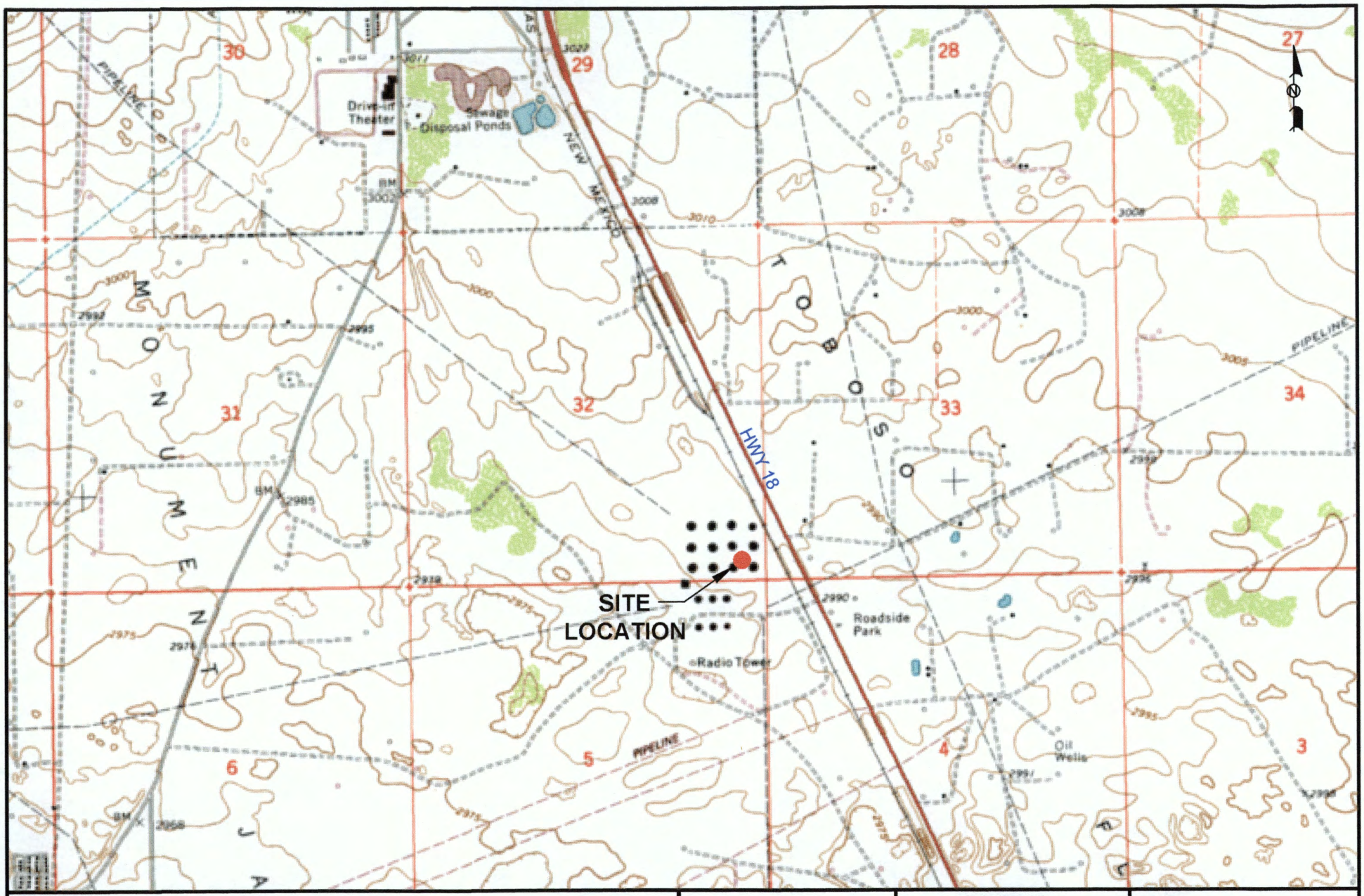
6.0 DISTRIBUTION

Copy 1:
Kellie Jones
New Mexico Oil Conservation Division (District 1)
1625 French Drive
Hobbs, NM 88240

Copy 2:
Camille Bryant
Plains Pipeline, L.P.
2530 Hwy 214
Denver City, Texas 79323

Copy 3:
Jeff Dann
Plains Pipeline, L.P.
333 Clay Street, Suite 1600
Houston, TX 77002
jpdann@paalp.com

Copy 4:
TRC Environmental Corporation
2057 Commerce Drive
Midland, TX 79703
cdstanley@trcsolutions.com



LEGEND:

2000 1000 0 1000 2000

Distance in Feet

Figure 1

Site Location Map
Plains Pipeline, LP.
Jal Tank Farm Booster 1287
Lea County, NM

Scale: 1" = 2000'
CAD By: TA
Checked By: RNH
Draft: April 15, 2015
Lat. N 32.080650° Long. W 103.178036°
SW1/4 SW1/4 Sec 32 T25S R37E

TRC
2057 Commerce Drive
Midland, Texas 79703
432.520.7720

TABLE 1
CONCENTRATIONS OF BTEX, TPH AND CHLORIDE IN SOIL

JAL TANK FARM TANK BOOSTER #1287
PLAINS PIPELINE, L.P.
LEA COUNTY, NM
NMOCD Reference Number 1RP-3570
PLAINS SRS NUMBER: 2015-044

SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH (feet)	Methods: EPA SW 846-8021B, 5030						Methods: EPA SW 846-8015M				Methods: E300
			BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	m,p, XYLENE (mg/Kg)	o-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	TOTAL TPH (mg/Kg)	Chloride mg/Kg
NMOCD Regulatory Guideline			**10**	**-**	**-**	**-**	**-**	**50**	**-**	**-**	**-**	**1,000**	**250**
Floor-1 @ 1'	03/31/15	1'	<0.00108	<0.00215	<0.00108	<0.00215	<0.00108	<0.00215	<26.9	<26.9	<26.9	<26.9	4.33
Floor-2 @ 2.5'	03/31/15	2.5'	<0.00105	<0.00211	<0.00105	<0.00211	<0.00105	<0.00211	<26.3	<26.3	<26.3	<26.3	-
NSW-2 @ 2'	03/31/15	2'	<0.00104	<0.00208	<0.00104	<0.00208	<0.00104	<0.00208	<26.0	77.5	35.7	113.2	-
SSW-2 @ 2.5'	03/31/15	2.5'	<0.00106	<0.00106	<0.00213	<0.00106	<0.00213	<0.00213	<26.6	<26.6	<26.6	<26.6	-
Floor-3 @ 3.5'	03/31/15	3.5'	<0.00108	<0.00215	<0.00108	<0.00215	<0.00108	<0.00215	<26.9	<26.9	<26.9	<26.9	-
NSW-3 @ 3'	03/31/15	3'	<0.00104	<0.00208	<0.00104	<0.00208	<0.00104	<0.00208	<26.0	<26.0	<26.0	<26.0	-
SSW-3 @ 3'	03/31/15	3'	<0.00104	<0.00208	<0.00104	<0.00208	<0.00104	<0.00208	<26.0	<26.0	<26.0	<26.0	-
Floor-4 @ 4.5'	03/31/15	4.5'	<0.00103	<0.00206	<0.00103	<0.00206	<0.00103	<0.00206	<25.8	<25.8	<25.8	<25.8	-
NSW-4 @ 4'	03/31/15	4'	<0.00104	<0.00208	<0.00104	<0.00208	<0.00104	<0.00208	<26.0	<26.0	<26.0	<26.0	-
SSW-4 @ 4'	03/31/15	4'	<0.00103	<0.00206	<0.00103	<0.00206	<0.00103	<0.00206	<25.8	<25.8	<25.8	<25.8	-
Floor-5 @ 4'	03/31/15	4'	<0.00104	<0.00208	<0.00104	<0.00208	<0.00104	<0.00208	<26.0	<26.0	<26.0	<26.0	-
NSW-5 @ 3.5'	03/31/15	3.5'	<0.00105	<0.00211	<0.00105	<0.00211	<0.00105	<0.00211	<26.3	<26.3	<26.3	<26.3	-
SSW-5 @ 3.5'	03/31/15	3.5'	<0.00105	<0.00211	<0.00105	<0.00211	<0.00105	<0.00211	<26.3	<26.3	<26.3	<26.3	-
Floor-6 @ 1'	03/31/15	1'	<0.00108	<0.00215	<0.00108	<0.00215	<0.00108	<0.00215	<26.9	<26.9	<26.9	<26.9	-
SP-1	05/15/15	-	<0.00106	<0.00213	<0.00106	<0.00213	<0.00106	<0.00213	<26.596	236.51	45.415	281.925	-

TRC
Results you can rely on

Photographic Documentation

Client: Plains Pipeline L.P.
Project Name: Jal Tank Farm Tank Booster 1287

Prepared by: TRC Environmental Corp.
Location: Lea County, NM

Photograph No. 1 **Date:** **March 15, 2015** **Description:** **Looking west** **Impacted area prior to excavation and remediation.**	
Photograph No. 2 **Date:** **March 19, 2015** **Description:** **Looking west** **Excavation activities in progress.**	

TRC
Results you can rely on

Photographic Documentation

Client: Plains Pipeline L.P.
Project Name: Jal Tank Farm Tank Booster 1287

Prepared by: TRC Environmental Corp.
Location: Lea County, NM

Photograph No. 3 **Date:** **March 31, 2015** **Description:** **Looking east.** **Excavation of impacted soil is complete and soil samples collected. Release point (transfer pump) is at top center of photo.**	
Photograph No. 4 **Date:** **July 15, 2015** **Description:** **Looking east.** **Backfill activities complete.**	

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

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
2057 Commerce Street
Midland, TX 79703

Project: Plains Jal Tank Farm Tank Booster 1287
Project Number: SRS# 2015-044
Location: Lea County, NM

Lab Order Number: 5D01008

NELAP ACCREDITED TNI LABORATORY

NELAP/TCEQ # T104704156-13-3

Report Date: 04/07/15

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Floor-1 @ 1'	5D01008-01	Soil	03/31/15 14:00	04-01-2015 14:16
Floor-2 @ 2.5'	5D01008-02	Soil	03/31/15 14:05	04-01-2015 14:16
NSW-2 @ 2'	5D01008-03	Soil	03/31/15 14:10	04-01-2015 14:16
SSW-2 @ 2.5'	5D01008-04	Soil	03/31/15 14:15	04-01-2015 14:16
Floor-3 @ 3.5'	5D01008-05	Soil	03/31/15 14:20	04-01-2015 14:16
NSW-3 @ 3'	5D01008-06	Soil	03/31/15 14:25	04-01-2015 14:16
SSW-3 @ 3'	5D01008-07	Soil	03/31/15 14:30	04-01-2015 14:16
Floor-4 @ 4.5'	5D01008-08	Soil	03/31/15 14:35	04-01-2015 14:16
NSW-4 @ 4'	5D01008-09	Soil	03/31/15 14:40	04-01-2015 14:16
SSW-4 @ 4'	5D01008-10	Soil	03/31/15 14:45	04-01-2015 14:16
Floor-5 @ 4'	5D01008-11	Soil	03/31/15 14:50	04-01-2015 14:16
NSW-5 @ 3.5'	5D01008-12	Soil	03/31/15 14:55	04-01-2015 14:16
SSW-5 @ 3.5'	5D01008-13	Soil	03/31/15 15:00	04-01-2015 14:16
Floor-6 @ 1'	5D01008-14	Soil	03/31/15 15:05	04-01-2015 14:16

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

Floor-1 @ 1'

5D01008-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00108	mg/kg dry	1	P5D0705	04/07/15	04/07/15	EPA 8021B	
Toluene	ND	0.00215	mg/kg dry	1	P5D0705	04/07/15	04/07/15	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P5D0705	04/07/15	04/07/15	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P5D0705	04/07/15	04/07/15	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P5D0705	04/07/15	04/07/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*94.3 %*	*75-125*		*P5D0705*	*04/07/15*	*04/07/15*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*83.8 %*	*75-125*		*P5D0705*	*04/07/15*	*04/07/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**7.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P5D0609	04/01/15	04/02/15	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P5D0609	04/01/15	04/02/15	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P5D0609	04/01/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.9 %*	*70-130*		*P5D0609*	*04/01/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*112 %*	*70-130*		*P5D0609*	*04/01/15*	*04/02/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	04/01/15	04/02/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

Floor-2 @ 2.5'

5D01008-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00105	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00211	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*97.2 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.8 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**5.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P5D0609	04/01/15	04/02/15	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P5D0609	04/01/15	04/02/15	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P5D0609	04/01/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*71.0 %*	*70-130*		*P5D0609*	*04/01/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*82.4 %*	*70-130*		*P5D0609*	*04/01/15*	*04/02/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	04/01/15	04/02/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

NSW-2 @ 2'

5D01008-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*99.3 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*94.4 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**4.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P5D0609	04/01/15	04/02/15	TPH 8015M	
>C12-C28	**77.5**	26.0	mg/kg dry	1	P5D0609	04/01/15	04/02/15	TPH 8015M	
>C28-C35	**35.7**	26.0	mg/kg dry	1	P5D0609	04/01/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*79.1 %*	*70-130*		*P5D0609*	*04/01/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*91.6 %*	*70-130*		*P5D0609*	*04/01/15*	*04/02/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**113**	26.0	mg/kg dry	1	[CALC]	04/01/15	04/02/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

SSW-2 @ 2.5'

5D01008-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00106	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00213	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*93.8 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*87.7 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**6.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.6	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*112 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*133 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	04/02/15	04/02/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

Floor-3 @ 3.5'

5D01008-05 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00108	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00215	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*91.7 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*93.1 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**7.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*132 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	04/02/15	04/02/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

NSW-3 @ 3'

5D01008-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*97.1 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*91.1 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**4.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*125 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	04/02/15	04/02/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

SSW-3 @ 3'

5D01008-07 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*89.4 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*96.7 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**4.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*106 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*125 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	04/02/15	04/02/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

Floor-4 @ 4.5'

5D01008-08 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00103	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00206	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*85.0 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**3.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*110 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*133 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	04/02/15	04/02/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

NSW-4 @ 4'

5D01008-09 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*93.2 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*92.4 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**4.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*128 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	04/02/15	04/02/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

SSW-4 @ 4'

5D01008-10 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00103	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00206	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*88.8 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*99.4 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**3.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P5D0603	04/02/15	04/02/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*106 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*127 %*	*70-130*		*P5D0603*	*04/02/15*	*04/02/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	04/02/15	04/02/15	calc	

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Midland TX, 79703	Project Manager: Curt Stanley	

Floor-5 @ 4'

5D01008-11 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*90.3 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*89.1 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**4.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		*P5D0603*	*04/02/15*	*04/03/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*129 %*	*70-130*		*P5D0603*	*04/02/15*	*04/03/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	04/02/15	04/03/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

NSW-5 @ 3.5'

5D01008-12 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00105	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00211	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*87.5 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.6 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**5.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		*P5D0603*	*04/02/15*	*04/03/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*124 %*	*70-130*		*P5D0603*	*04/02/15*	*04/03/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	04/02/15	04/03/15	calc	

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
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Midland TX, 79703	Project Manager: Curt Stanley	

SSW-5 @ 3.5'

5D01008-13 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00105	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00211	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*91.9 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*89.2 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**5.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*109 %*	*70-130*		*P5D0603*	*04/02/15*	*04/03/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*129 %*	*70-130*		*P5D0603*	*04/02/15*	*04/03/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	04/02/15	04/03/15	calc	

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Floor-6 @ 1'

5D01008-14 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00108	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Toluene	ND	0.00215	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P5D0703	04/06/15	04/06/15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*89.9 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*102 %*	*75-125*		*P5D0703*	*04/06/15*	*04/06/15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**7.0**	0.1	%	1	P5D0201	04/02/15	04/02/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P5D0603	04/02/15	04/03/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		*P5D0603*	*04/02/15*	*04/03/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*125 %*	*70-130*		*P5D0603*	*04/02/15*	*04/03/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	04/02/15	04/03/15	calc	

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Midland TX, 79703	Project Manager: Curt Stanley	

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 P5D0703 - General Preparation (GC)										
Blank (P5D0703-BLK1)				Prepared & Analyzed: 04/06/15						
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	*0.0607*		"	*0.0600*		*101*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0516*		"	*0.0600*		*86.0*	*75-125*			
LCS (P5D0703-BS1)				Prepared & Analyzed: 04/06/15						
Benzene	0.105	0.00100	mg/kg wet	0.100		105	70-130			
Toluene	0.113	0.00200	"	0.100		113	70-130			
Ethylbenzene	0.111	0.00100	"	0.100		111	70-130			
Xylene (p/m)	0.225	0.00200	"	0.200		112	70-130			
Xylene (o)	0.115	0.00100	"	0.100		115	70-130			
Surrogate: 4-Bromofluorobenzene	*0.0631*		"	*0.0600*		*105*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0599*		"	*0.0600*		*99.8*	*75-125*			
LCS Dup (P5D0703-BSD1)				Prepared & Analyzed: 04/06/15						
Benzene	0.0941	0.00100	mg/kg wet	0.100		94.1	70-130	10.7	20	
Toluene	0.102	0.00200	"	0.100		102	70-130	10.0	20	
Ethylbenzene	0.111	0.00100	"	0.100		111	70-130	0.0360	20	
Xylene (p/m)	0.220	0.00200	"	0.200		110	70-130	2.14	20	
Xylene (o)	0.108	0.00100	"	0.100		108	70-130	6.00	20	
Surrogate: 1,4-Difluorobenzene	*0.0574*		"	*0.0600*		*95.7*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0662*		"	*0.0600*		*110*	*75-125*			
Matrix Spike (P5D0703-MS1)	**Source: 5D02006-05**			Prepared: 04/06/15 Analyzed: 04/07/15						
Benzene	1.99	0.0213	mg/kg dry	0.106	0.0300	NR	80-120			QM-05
Toluene	3.66	0.0426	"	0.106	0.446	NR	80-120			QM-05
Ethylbenzene	3.27	0.0213	"	0.106	0.507	NR	80-120			QM-05
Xylene (p/m)	6.54	0.0426	"	0.213	1.84	NR	80-120			QM-05
Xylene (o)	2.82	0.0213	"	0.106	0.546	NR	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	*0.0581*		"	*0.0638*		*91.0*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0513*		"	*0.0638*		*80.4*	*75-125*			

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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
Batch P5D0705 - General Preparation (GC)										
Blank (P5D0705-BLK1)				Prepared & Analyzed: 04/07/15						
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	*69.7*		*ug/kg*	*60.0*		*116*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*56.5*		*"*	*60.0*		*94.2*	*75-125*			
LCS (P5D0705-BS1)				Prepared & Analyzed: 04/07/15						
Benzene	0.0811	0.00100	mg/kg wet	0.100		81.1	70-130			
Toluene	0.0991	0.00200	"	0.100		99.1	70-130			
Ethylbenzene	0.108	0.00100	"	0.100		108	70-130			
Xylene (p/m)	0.204	0.00200	"	0.200		102	70-130			
Xylene (o)	0.103	0.00100	"	0.100		103	70-130			
Surrogate: 1,4-Difluorobenzene	*55.8*		*ug/kg*	*60.0*		*93.0*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*57.8*		*"*	*60.0*		*96.4*	*75-125*			
LCS Dup (P5D0705-BSD1)				Prepared & Analyzed: 04/07/15						
Benzene	0.0914	0.00100	mg/kg wet	0.100		91.4	70-130	12.0	20	
Toluene	0.108	0.00200	"	0.100		108	70-130	8.68	20	
Ethylbenzene	0.114	0.00100	"	0.100		114	70-130	5.60	20	
Xylene (p/m)	0.238	0.00200	"	0.200		119	70-130	15.5	20	
Xylene (o)	0.118	0.00100	"	0.100		118	70-130	13.1	20	
Surrogate: 1,4-Difluorobenzene	*55.1*		*ug/kg*	*60.0*		*91.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*63.0*		*"*	*60.0*		*105*	*75-125*			

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2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

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 P5D0201 - * DEFAULT PREP *** **										
Blank (P5D0201-BLK1)				Prepared & Analyzed: 04/02/15						
% Moisture	ND	0.1	%							
Duplicate (P5D0201-DUP1)		**Source: 5D01004-01**		Prepared & Analyzed: 04/02/15						
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P5D0201-DUP2)		**Source: 5D01005-17**		Prepared & Analyzed: 04/02/15						
% Moisture	ND	0.1	%		0.0				20	
Duplicate (P5D0201-DUP3)		**Source: 5D01008-14**		Prepared & Analyzed: 04/02/15						
% Moisture	7.0	0.1	%		7.0			0.00	20	

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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
Batch P5D0603 - TX 1005										
Blank (P5D0603-BLK1)				Prepared & Analyzed: 04/02/15						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*112*		"	*100*		*112*	*70-130*			
Surrogate: o-Terphenyl	*65.2*		"	*50.0*		*130*	*70-130*			
LCS (P5D0603-BS1)				Prepared & Analyzed: 04/02/15						
C6-C12	805	25.0	mg/kg wet	1000		80.5	75-125			
>C12-C28	901	25.0	"	1000		90.1	75-125			
Surrogate: 1-Chlorooctane	*126*		"	*100*		*126*	*70-130*			
Surrogate: o-Terphenyl	*62.4*		"	*50.0*		*125*	*70-130*			
LCS Dup (P5D0603-BSD1)				Prepared & Analyzed: 04/02/15						
C6-C12	778	25.0	mg/kg wet	1000		77.8	75-125	3.34	20	
>C12-C28	892	25.0	"	1000		89.2	75-125	0.983	20	
Surrogate: 1-Chlorooctane	*123*		"	*100*		*123*	*70-130*			
Surrogate: o-Terphenyl	*61.6*		"	*50.0*		*123*	*70-130*			
Matrix Spike (P5D0603-MS1)	**Source: 5D02011-01**			Prepared: 04/02/15 Analyzed: 04/03/15						
C6-C12	845	26.0	mg/kg dry	1040	ND	81.1	75-125			
>C12-C28	1020	26.0	"	1040	132	85.4	75-125			
Surrogate: 1-Chlorooctane	*117*		"	*104*		*112*	*70-130*			
Surrogate: o-Terphenyl	*54.5*		"	*52.1*		*105*	*70-130*			
Matrix Spike Dup (P5D0603-MSD1)	**Source: 5D02011-01**			Prepared: 04/02/15 Analyzed: 04/03/15						
C6-C12	848	26.0	mg/kg dry	1040	ND	81.4	75-125	0.298	20	
>C12-C28	968	26.0	"	1040	132	80.2	75-125	6.26	20	
Surrogate: 1-Chlorooctane	*123*		"	*104*		*118*	*70-130*			
Surrogate: o-Terphenyl	*54.2*		"	*52.1*		*104*	*70-130*			

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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
Batch P5D0609 - TX 1005										
Blank (P5D0609-BLK1)				Prepared: 04/01/15 Analyzed: 04/02/15						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*94.6*		*mg/kg*	*100*		*94.6*	*70-130*			
Surrogate: o-Terphenyl	*55.5*		*"*	*50.0*		*111*	*70-130*			
LCS (P5D0609-BS1)				Prepared: 04/01/15 Analyzed: 04/02/15						
C6-C12	1020	25.0	mg/kg wet	1000		102	75-125			
>C12-C28	1180	25.0	"	1000		118	75-125			
Surrogate: 1-Chlorooctane	*109*		*mg/kg*	*100*		*109*	*70-130*			
Surrogate: o-Terphenyl	*52.2*		*"*	*50.0*		*104*	*70-130*			
LCS Dup (P5D0609-BSD1)				Prepared: 04/01/15 Analyzed: 04/02/15						
C6-C12	893	25.0	mg/kg wet	1000		89.3	75-125	13.5	20	
>C12-C28	1110	25.0	"	1000		111	75-125	6.36	20	
Surrogate: 1-Chlorooctane	*99.4*		*mg/kg*	*100*		*99.4*	*70-130*			
Surrogate: o-Terphenyl	*43.9*		*"*	*50.0*		*87.9*	*70-130*			
Duplicate (P5D0609-DUP1)	**Source: 5C27007-04**			Prepared: 04/01/15 Analyzed: 04/02/15						
C6-C12	ND	26.3	mg/kg dry		ND				20	
>C12-C28	ND	26.3	"		18.5				20	
Surrogate: 1-Chlorooctane	*79.4*		*mg/kg*	*100*		*79.4*	*70-130*			
Surrogate: o-Terphenyl	*45.9*		*"*	*50.0*		*91.8*	*70-130*			

TRC Solutions- Midland, Texas	Project: Plains Jal Tank Farm Tank Booster 1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: SRS# 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
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.
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: 4/7/2015

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.

PAGE 1 OF 2

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Curt Stanley

Company Name: NOVA Safety and Environmental / TRCSolutions

Company Address: 2057 Commerce

City/State/Zip: Midland, Texas 79703

Telephone No: 432-620-7720

Fax No:

Sampler Signature:

e-mail: cdstanley@trcsolutions.com
cjbryant@paaip.com

Project Name: Plains Jal Tank Farm Tank Booster 1287

Project #: 2015-044

Project Loc: Lea County, NM

PO #:

Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 5D01608

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 X	RCI	TCLP Benzene	TCLP:	TOTAL:	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	Floor-1 @ 1'			3/31/2015	1400		1	x								Soil	X								X						X
2	Floor-2 @ 2.5'			3/31/2015	1405		1	x								Soil	X								X						X
3	NSW-2 @ 2'			3/31/2015	1410		1	x								Soil	X								X						X
4	SSW-2 @ 2.5'			3/31/2015	1415		1	x								Soil	X								X						X
5	Floor-3 @ 3.5'			3/31/2015	1420		1	x								Soil	X								X						X
6	NSW-3 @ 3'			3/31/2015	1425		1	x								Soil	X								X						X
7	SSW-3 @ 3'			3/31/2015	1430		1	x								Soil	X								X						X
8	Floor-4 @ 4.5'			3/31/2015	1435		1	x								Soil	X								X						X
9	NSW-4 @ 4'			3/31/2015	1440		1	x								Soil	X								X						X

Special Instructions:

Relinquished by:	Date 4-1-15	Time 14:16	Received by:	Date	Time	
Relinquished by:	Date	Time	Received by:	Date	Time	
Relinquished by:	Date	Time	Received by PBEL: Marissa Martin	Date 4-1-15	Time 14:16	

Laboratory Comments:

Sample Containers Intact?	N
VOCs Free of Headspace?	N
Labels on container(s)	N
Custody seals on container(s)	N
Custody seals on cooler(s)	N
Sample Hand Delivered	N
by Sampler/Client Rep. ?	N
by Courier? UPS DHL FedEx Lone Star	

Temperature Upon Receipt:
Received: °C
Adjusted: 5.0 °C Factor NCF

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706
Phone: 432-661-4184

Project Manager: Curt Stanley
Company Name: NOVA Safety and Environmental / TRCSolutions
Company Address: 2057 Commerce
City/State/Zip: Midland, Texas 79703
Telephone No: 432-520-7720
Fax No:
Sampler Signature:
e-mail: cdstanley@trcsolutions.com, cjbryant@paalp.com

Project Name: Plains Jal Tank Farm Tank Booster 1287
Project #: 2015-044
Project Loc: Lea County, NM
PO #:
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 5D01008

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water GW = Groundwater NP=Non-Potable SL=Sludge S=Soil/Solid Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 X	RCI	TCLP Benzene				RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
10	SSW-4 @ 4'			3/31/2015	1445		1	x								Soil	X								X							X
11	Floor-5 @ 4'			3/31/2015	1450		1	x								Soil	X								X							X
12	NSW-5 @ 3.5'			3/31/2015	1455		1	x								Soil	X								X							X
13	SSW-5 @ 3.5'			3/31/2015	1500		1	x								Soil	X								X							X
14	Floor-6 @ 1'			3/31/2015	1505		1	x								Soil	X								X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL: Mangra Martin	Date 4-1-15	Time 14:16

Laboratory Comments:

Sample Containers Intact?	N
VOCs Free of Headspace?	N
Labels on container(s)	N
Custody seals on container(s)	N
Custody seals on cooler(s)	N
Sample Hand Delivered	N
by Sampler/Client Rep. ?	N
by Courier? UPS DHL FedEx Lone Star	
Temperature Upon Receipt:	
Received: °C	
Adjusted: 5.0 °C Factor NCF	

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

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
2057 Commerce Street
Midland, TX 79703

Project: Jal Basin Station Booster Pump #1287
Project Number: 2015-044
Location: Lea County, NM

Lab Order Number: 5E18010

NELAP ACCREDITED TNI LABORATORY

NELAP/TCEQ # T104704156-13-3

Report Date: 05/28/15

TRC Solutions- Midland, Texas	Project: Jal Basin Station Booster Pump #1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-1	5E18010-01	Soil	05/15/15 13:10	05-18-2015 10:50

TRC Solutions- Midland, Texas	Project: Jal Basin Station Booster Pump #1287	Fax: (432) 520-7701
2057 Commerce Street	Project Number: 2015-044	
Midland TX, 79703	Project Manager: Curt Stanley	

SP-1

5E18010-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00106	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Toluene	ND	0.00213	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P5E2802	05/22/15	05/23/15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*125 %*	*75-125*		*P5E2802*	*05/22/15*	*05/23/15*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*135 %*	*75-125*		*P5E2802*	*05/22/15*	*05/23/15*	*EPA 8021B*	
C6-C12	ND	26.596	mg/kg dry	1	P5E2002	05/18/15	05/20/15	TX 1005	
>C12-C28	**236.51**	26.596	mg/kg dry	1	P5E2002	05/18/15	05/20/15	TX 1005	
>C28-C35	**45.415**	26.596	mg/kg dry	1	P5E2002	05/18/15	05/20/15	TX 1005	
Surrogate: 1-Chlorooctane		*112 %*	*70-130*		*P5E2002*	*05/18/15*	*05/20/15*	*TX 1005*	
Surrogate: o-Terphenyl		*139 %*	*70-130*		*P5E2002*	*05/18/15*	*05/20/15*	*TX 1005*	
Total Hydrocarbon nC6-nC35	**281.93**	26.596	mg/kg dry	1	[CALC]	05/18/15	05/20/15	[CALC]	
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**6.0**	0.1	%	1	P5E1906	05/19/15	05/19/15	% calculation	

TRC Solutions- Midland, Texas
2057 Commerce Street
Midland TX, 79703

Project: Jal Basin Station Booster Pump #1287
Project Number: 2015-044
Project Manager: Curt Stanley

Fax: (432) 520-7701

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 P5E2002 - TX 1005										
Blank (P5E2002-BLK1)				Prepared: 05/18/15 Analyzed: 05/19/15						
C6-C12	ND	25.000	mg/kg wet							
>C12-C28	ND	25.000	"							
>C28-C35	ND	25.000	"							
Surrogate: 1-Chlorooctane	*78.7*		*"*	*100*		*78.7*	*70-130*			
Surrogate: o-Terphenyl	*47.9*		*"*	*50.0*		*95.8*	*70-130*			
LCS (P5E2002-BS1)				Prepared: 05/18/15 Analyzed: 05/19/15						
C6-C12	725	25.000	mg/kg wet	700		104	75-125			
>C12-C28	842	25.000	"	700		120	75-125			
Surrogate: 1-Chlorooctane	*110*		*"*	*100*		*110*	*70-130*			
Surrogate: o-Terphenyl	*53.7*		*"*	*50.0*		*107*	*70-130*			
LCS Dup (P5E2002-BSD1)				Prepared: 05/18/15 Analyzed: 05/19/15						
C6-C12	750	25.000	mg/kg wet	700		107	75-125	3.30	20	
>C12-C28	851	25.000	"	700		122	75-125	1.06	20	
Surrogate: 1-Chlorooctane	*105*		*"*	*100*		*105*	*70-130*			
Surrogate: o-Terphenyl	*48.5*		*"*	*50.0*		*97.0*	*70-130*			
Matrix Spike (P5E2002-MS1)	**Source: 5E18006-01**			Prepared: 05/18/15 Analyzed: 05/20/15						
C6-C12	751	25.510	mg/kg dry	714	ND	105	75-125			
>C12-C28	799	25.510	"	714	ND	112	75-125			
Surrogate: 1-Chlorooctane	*86.5*		*"*	*102*		*84.8*	*70-130*			
Surrogate: o-Terphenyl	*39.0*		*"*	*51.0*		*76.5*	*70-130*			
Matrix Spike Dup (P5E2002-MSD1)	**Source: 5E18006-01**			Prepared: 05/18/15 Analyzed: 05/20/15						
C6-C12	653	25.510	mg/kg dry	714	ND	91.4	75-125	14.0	20	
>C12-C28	734	25.510	"	714	ND	103	75-125	8.47	20	
Surrogate: 1-Chlorooctane	*87.0*		*"*	*102*		*85.3*	*70-130*			
Surrogate: o-Terphenyl	*35.4*		*"*	*51.0*		*69.4*	*70-130*			*S-GC*

TRC Solutions- Midland, Texas
2057 Commerce Street
Midland TX, 79703

Project: Jal Basin Station Booster Pump #1287
Project Number: 2015-044
Project Manager: Curt Stanley

Fax: (432) 520-7701

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 P5E2802 - TX 1005										
Blank (P5E2802-BLK1)				Prepared & Analyzed: 05/22/15						
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	*0.0621*		"	*0.0500*		*124*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0524*		"	*0.0500*		*105*	*75-125*			
LCS (P5E2802-BS1)				Prepared & Analyzed: 05/22/15						
Benzene	0.0947	0.00100	mg/kg wet	0.100		94.7	70-130			
Toluene	0.108	0.00200	"	0.100		108	70-130			
Ethylbenzene	0.109	0.00100	"	0.100		109	70-130			
Xylene (p/m)	0.213	0.00200	"	0.200		106	70-130			
Xylene (o)	0.104	0.00100	"	0.100		104	70-130			
Surrogate: 4-Bromofluorobenzene	*0.0580*		"	*0.0500*		*116*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0663*		"	*0.0500*		*133*	*75-125*			*S-GC*
LCS Dup (P5E2802-BSD1)				Prepared & Analyzed: 05/22/15						
Benzene	0.0911	0.00100	mg/kg wet	0.100		91.1	70-130	3.89	20	
Toluene	0.103	0.00200	"	0.100		103	70-130	4.68	20	
Ethylbenzene	0.109	0.00100	"	0.100		109	70-130	0.302	20	
Xylene (p/m)	0.213	0.00200	"	0.200		107	70-130	0.413	20	
Xylene (o)	0.104	0.00100	"	0.100		104	70-130	0.615	20	
Surrogate: 4-Bromofluorobenzene	*0.0600*		"	*0.0500*		*120*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0616*		"	*0.0500*		*123*	*75-125*			

TRC Solutions- Midland, Texas
2057 Commerce Street
Midland TX, 79703

Project: Jal Basin Station Booster Pump #1287
Project Number: 2015-044
Project Manager: Curt Stanley

Fax: (432) 520-7701

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 P5E1906 - * DEFAULT PREP *** **										
Blank (P5E1906-BLK1)				Prepared & Analyzed: 05/19/15						
% Moisture	ND	0.1	%							
Duplicate (P5E1906-DUP1)		**Source: 5E18010-01**		Prepared & Analyzed: 05/19/15						
% Moisture	6.0	0.1	%		6.0			0.00	20	

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: Brent Barron Date: 5/28/2015

Brent Barron, Laboratory Director/Technical Director

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Curt Stanley
Company Name: NOVA Safety and Environmental / TRCSolutions
Company Address: 2057 Commerce
City/State/Zip: Midland, Texas 79703
Telephone No: 432-520-7720 Fax No:
Sampler Signature: e-mail: cdstanley@trcsolutions.com, cjbryant@paalp.com

Project Name: Jal Basin Station Booster Pump #1287
Project #: 2015-044
Project Loc: Lea County, NM
PO #:
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 5E18010

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 / 8015M / 8015B	TPH: TX 1005 / TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	TCLP Benzene	Chloride E 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
201	SP-1			5/15/2015	1310		1	x								Soil	X								X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	5/18/15	1050			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	Date 5/18/15	Time 1050

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: 3.2 °C
Adjusted: °C Factor NCF