

AE Order Number Banner

Report Description

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App Number: pJXK1604139142

1RP - 2997

TORO OPERATING

2/10/2016

HOBBS OCD

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

MAY 2 3 2014

Form C-141 Revised August 8, 2011

Submit 1 CRECEDING ate District Office in accordance with 19.15.29 NMAC.

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

Release Notification and Corrective Action

	OPERATOR	Initial Report	Final Report
Name of Company Toro Operating (High Sierra Transportation)	Contact Craig Rutland		
Address Mile Marker 41.5, S. Hwy 18 Hobbs, New Mexico	Telephone No. 720-425-4249		4 M
Facility Name Hobbs Station (Carpenter Station)	Facility Type Crude Oil Tank Ba	attery	
Surface Owner Toro Operating Company, Inc. Mineral Owner	er	API No.	3

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	14	205	38E					Lea

Latitude 32° 34' 38.38 Longitude 103° 07' 25.84"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 48 bbls	Volume Recovered 35 bbls
Source of Release 1,000 bbls Crude Oil Storage Tank	Date and Hour of Occurrence November 20, 2013 – 2130 hours	Date and Hour of Discovery November 20, 2013 – 2130 hours
Was Immediate Notice Given?	If YES, To Whom? Geoffrey Leking - NMOCD Hobb	s District Office
By Whom? Curt Stanley (NOVA Safety and Environmental) Agent	Date and Hour November 21, 2013	- about 1530 hours
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* An equipment failure resulted in the release of crude oil from the crud The release occurred within an earthen containment and no liquids we approximately 35 bbls of crude oil,	le oil storage tank. The incident is under i ere released outside the containment. A va	nvestigation by High Sierra Transportation. courn truck was utilized to recover
Describe Area Affected and Cleanup Action Taken. The area affected containment. Impacted soil within the secondary containment was exe collected and submitted to the laboratory. Impacted soil outside the ea and NMOCD has determined High Sierra has adequately remediated in dated May 2014 for additional details.	l by the release measures less than forty (4 cavated by hand and mechanical means ar ast secondary containment sidewall does n impacted soil associated with this release.	10) by forty-five (45) feet within the ad stockpiled on site. Soil samples were not appear to be associated with this release Please reference "Remediation Summary"
I hereby certify that the information given above is true and complete regulations all operators are required to report and/or file certain relea public health or the environment. The acceptance of a C-141 report b should their operations have failed to adequately investigate and reme or the environment. In addition, NMOCD acceptance of a C-141 report federal, state, or local lows and/or regulations.	to the best of my knowledge and understa use notifications and perform corrective ac- ny the NMOCD marked as "Final Report" ediate contamination that pose a threat to go ort does not relieve the operator of respon	and that pursuant to NMOCD rules and tions for releases which may endanger does not relieve the operator of liability ground water, surface water, human health sibility for compliance with any other
Signature: Mig Statting	OIL CONSER	Stery Sermy
Printed Name: Craig Rutland	Approved by Environmental Special	environmental Specialist
Title: EHS Director (High Sierra Transportation)	Approval Date: 5/23/14	Expiration Date:
E-mail Address: crutland@highsierraenergy.com	Conditions of Approval:	Attached
Date: 5/16/14 Phone: 720-425-4249		114-12-12-2447

* Attach Additional Sheets If Necessary

HOEES OCD

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

DEC 0 4 2013 Form C-141 Revised August 8, 2011

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

Release Notification and Corrective Action

	OPERATOR	Initial Report	Final Report
Name of Company Toro Operating	Contact Jason Griffith		
Address Mile Marker 41.5, S. Hwy 18 Hobbs, New Mexic	o Telephone No. 620-243-2507		
Facility Name Hobbs Station (Carpenter Station)	Facility Type Crude Oil Tank B	attery	
Surface Owner Toro Operating Company, Inc. Mineral Ow	vner	API No.	

Surface Owner Toro Operating Company, Inc. Mineral Owner

LOCATION OF RELEASE North/South Line | Feet from the East/West Line Feet from the County Unit Letter Section Township Range 14 20S 38E Lea D

Latitude 32° 34' 38.38 Longitude 103° 07' 25.84"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 48 bbls	Volume Recovered 35 bbls
Source of Release 1,000 bbls Crude Oil Storage Tank	Date and Hour of Occurrence November 20, 2013 – 2130 hours	Date and Hour of Discovery November 20, 2013 - 2130 hours
Was Immediate Notice Given?	If YES, To Whom? Geoffrey Leking – NMOCD Hobbs	District Office
By Whom? Curt Stanley (NOVA Safety and Environmental) Agent	Date and Hour November 21, 2013	- about 1530 hours
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	tercourse.

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

An equipment failure resulted in the release of crude oil from the crude oil storage tank. The incident is under investigation by High Sierra Transportation. The release occurred within an earthen containment and no liquids were released outside the containment. A vacuum truck was utilized to recover approximately 35 bbls of crude oil,

Describe Area Affected and Cleanup Action Taken. The area affected by the release measures less than forty (40) by forty-five (45) feet within the containment. An Environmental Contractor was retained to remediate the release to NMOCD Regulatory 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: Arth	OIL CONSERVATION DIVISION
Printed Name: Jason Griffith	Approved by Environmental Specialist
Title: EHS Specialist (High Sierra Transportation)	Approval Date: +2/04/13 Expiration Date: 2/04/13
E-mail Address: jgriffith@highsierraenergy.com	Conditions of Approval: 50 BMIT Attached
Date: 12/4/13 Phone: 620-243-2507	FINAL C-141 BY 02104113 IRP-12-13-2997

* Attach Additional Sheets If Necessary



REMEDIATION SUMMARY

High Sierra Transportation Hobbs Station (Carpenter Station) Lea County, New Mexico UNIT LTR "D" (NW ¼/NW ¼), Section 14, Township 20 South, Range 38 East Latitude 32° 34' 38.38" North, Longitude 103° 07' 28.84' West NMOCD Reference # 1RP-12-13-2997

Prepared For:

High Sierra Transportation 3773 Cherry Creek North Drive, Suite 1000 Denver, Colorado 80209

Prepared By:

HOBBS OCD

NOVA Safety & Environmental 2057 Commerce Midland, Texas 79703

MAY 2 3 2014

RECEIVED

May 2014

appoved Environmental Specialist

NMOCO-DISTI 5/23/14

nila Brittan K. Byerly, P.G President

Curt D Stanley

Project Manager

safety and environmental

1.0 INTRODUCTION

NOVA Safety & Environmental (NOVA), on behalf of High Sierra Transportation (High Sierra), has prepared this Remediation Summary for the release site known as Hobbs Station (Carpenter Station). The legal description of the release site is Unit Letter "D", Section 14, Township 20 South, Range 38 East, in Lea County, New Mexico. The property affected by the release is owned by Toro Operating Company, Inc. The release site GPS coordinates are 32° 34' 38.38" North and 103° 07' 25.84" West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site Details Schematic and Confirmation Soil Sample Locations Map. Photographs are provided as Appendix A.

On November 20, 2013, an equipment failure at a crude oil storage tank resulted in the release of approximately forty-eight (48) barrels of crude oil into an earthen containment. The release was contained within the earthen containment and a vacuum truck was utilized to recover approximately thirty-five (35) barrels of crude oil. An area measuring approximately forty-five (45) feet in width and approximately forty (40) in length was affected by the release. On November 20, 2013, the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office was verbally notified of the release and a Release Notification and Corrective Action (NMOCD Form C-141) was submitted to the NMOCD on December 4, 2013. The New Mexico Oil Conservation Division (NMOCD) Release Notification and Corrective Action (Form C-141) is provided as Appendix C.

2.0 NMOCD SITE CLASSIFICATION

According to data obtained from The New Mexico Office of the State Engineer (NMOSE), three (3) water wells are registered in Section 14, Township 20 South, Range 38 East. The NMOSE water well database indicates the average depth to groundwater should be approximately fortynine (49) feet below ground surface (bgs). A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately depths less than fifty (50) feet bgs. The inferred depth to groundwater at the Hobbs Station (Carpenter Station) Release Site results in a score of twenty (20) points being assigned to the site based on the NMOCD depth to groundwater criteria.

The water well database, maintained by the NMOSE, indicates there is one (1) registered water well located approximately two hundred twenty (220) feet west of the Release Site. Based on the proximity of the registered water well to the release site, twenty (20) points are assigned to the Release Site.

There are no surface water bodies located within 1,000 feet of the site. Based on the NMOCD ranking system zero (0) points will be assigned to the site as a result of the criteria.

The NMOCD guidelines indicate the Hobbs Station (Carpenter Station) Release Site has ranking score of forty (40). Based on this score, the soil remediation levels for a site with a ranking score of forty (40) points are as follows:

- Benzene 10 mg/Kg (ppm)
- BTEX 50 mg/Kg (ppm)
- TPH 100 mg/Kg (ppm)

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

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On November 22, 2013, NOVA, at the request of High Sierra, commenced remediation activities at the Hobbs Station (Carpenter Station) Release Site. Laborers removed hydrocarbon impacted soil from within the earthen containment using hand shovels and wheelbarrows and the impacted soil was stockpiled on plastic at the southeast corner of the facility. The total depth of the initial excavation ranged from approximately six (6) inches to two (2) feet bgs. A vacuum truck was utilized to remove approximately forty (40) barrels of standing crude oil from the interior of the release source storage tank.

On November 26, 2013, four (4) soil samples (Sample Point 1 through Sample Point 4) were collected and submitted to the laboratory for determination of concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) and total petroleum hydrocarbons (TPH) using EPA Method SW846-8021b and SW846-8015M, respectively. TPH concentrations ranged from 30.5 mg/Kg in soil sample "Sample Point 2" to 30,000 mg/Kg in soil sample "Sample Point 4". Soil samples exhibiting TPH concentrations above the NMOCD regulatory guidelines were not analyzed for BTEX. The analytical results indicated benzene concentrations in soil samples "Sample Point 2" and "Sample Point 3" were less than the appropriate Method Detection Limit (MDL). BTEX concentrations in soil samples "Sample Point 2" to 0.0451 mg/Kg in soil sample "Sample Point 3". The analytical results indicated additional excavation was warranted in the areas represented by soil samples "Sample Point 1" and "Sample Point 4". Table 1 summarizes the Concentrations of Benzene, BTEX and TPH in Soil. Laboratory analytical reports are provided as Appendix B.

On December 2, 2013, based on the analytical results, additional hand and mechanical excavation in the area represented by "Sample Point 1" and "Sample Point 4" was conducted. The area represented by "Sample Point 1" was excavated to a total depth of approximately nine (9) inches bgs and the area represented by "Sample Point 4" was excavated to a total depth of approximately three (3) feet bgs. Excavated soil was added to the soil stockpile located on the southeast corner of the facility. During the excavation of this area the earthen berm was removed and the excavation was extended outside of the confines of the earthen containment. During the excavation of the area represented by "Sample Point 4" a layer of heavily hydrocarbon impacted soil measuring approximately three (3) inches in thickness was observed at approximately two and one half (2.5) feet bgs on the east sidewall of the excavation. This layer of heavily hydrocarbon impacted soil did not appear to be associated to the High Sierra Release.

On December 2, 2013, one (1) confirmation soil sample (Sample Point 1-A) was collected from the area represented by "Sample Point 1" and submitted to the laboratory for analysis. The analytical results indicated the benzene concentration of the soil sample was less than the laboratory MDL of 0.00100 mg/Kg and the BTEX concentration was 0.00833 mg/Kg. The TPH concentration of soil sample "Sample Point 1" was less than the laboratory MDL of 27.5 mg/Kg. Based on the analytical results no additional exaction in the area represented by soil sample "Sample Point 1" was warranted.

In addition, a soil sample (Sample Point 4-A @ 3') was collected from the floor of the excavation beneath soil sample "Sample Point 4". The analytical results indicated the TPH concentration was 1,390 mg/Kg. Due to the depth of the "Sample Point 4" excavation, four (4) sidewall soil samples (Sample Point 4 Exc. WW, Sample Point 4 Exc. SW, Sample Point 4 Exc. EW, and Sample Point

4 Exc. NW) were collected and submitted for laboratory analysis. The analytical results indicated TPH concentrations ranged from less than the laboratory MDL of 27.2 mg/Kg for "Sample Point 4 Exc. NW" and "Sample Point 4 Exc. WW" to 781 mg/Kg for "Sample Point 4 Exc. EW". Soil samples exhibiting TPH concentrations above the NMOCD regulatory guidelines were not analyzed for BTEX. Benzene concentrations for soil samples "Sample Point 4 Exc. WW", "Sample Point 4 Exc. SW", and "Sample Point 4 Exc. NW" were less than the laboratory MDL and BTEX concentrations ranged from less than the laboratory MDL of 0.00217 mg/Kg for soil samples "Sample Point 4 Exc. WW" and "Sample Point 4 Exc. NW" to 0.07258 mg/Kg for soil sample "Sample Point 4 Exc. SW". Based on the analytical results, additional excavation was warranted on the floor and east sidewall of the excavation.

On December 11, 2013, based on the analytical results and field observations, a NOVA representative met with a NMOCD Hobbs District Office Representative to discuss a path forward at the Release Site. The two (2) representatives agreed to excavate an investigation trench approximately fifteen (15) to the east of the "Sample Point 4" excavation to identify the source of the heavily impacted soil at two and one half (2.5) feet bgs. In addition, it was agreed the "Sample Point 4" excavation would be further excavated and additional soil samples would be collected.

On February 24, 2014, additional excavation activities were conducted in the area represented by "Sample Point 4". The excavation at "Sample Point 4" was excavated to a total depth of approximately six (6) feet bgs. In addition, the east and south sidewalls of the previous (December 2, 2013) excavation were excavated an additional three (3) feet horizontally. Following the excavation of this area, five (5) confirmation soil samples (Sample Point 4 Expanded EXC BH @ 6', Sample Point 4 Expanded EXC SW @ 5', Sample Point 4 Expanded EXC WW @ 5', Sample Point 4 Expanded EXC EW @ 4', and Sample Point 4 Expanded EXC WW @ 5') were collected and submitted to the laboratory for analysis. The analytical results indicated benzene concentrations ranged from less than the appropriate laboratory MDL for sail samples "Sample Point 4 Expanded EXC BH @ 6", "Sample Point 4 Expanded EXC WW @ 5", "Sample Point 4 Expanded EXC EW @ 4", and "Sample Point 4 Expanded EXC WW @ 5" to 0.0120 mg/Kg for Sample Point 4 Expanded EXC SW @ 5'. BTEX concentrations ranged from 0.00324 mg/Kg for soil sample "Sample Point 4 Expanded EXC WW @ 5" to 1.412 mg/Kg for soil sample "Sample Point 4 Expanded EXC WW @ 5". TPH concentrations ranged from 86.9 mg/Kg for soil sample "Sample Point 4 Expanded EXC WW @ 5" to 2,300 mg/Kg for soil sample "Sample Point 4 Expanded EXC SW @ 5". Based on the analytical results and visual observations, it appears hydrocarbons encountered on the east and south sidewalls of the excavation are not associated with the High Sierra release.

On February 24, 2014, a soil investigation trench was excavated from east sidewall of the excavation. The soil investigation trench measured approximately three (3) feet in width, fifteen (15) feet in length and approximately four (4) feet in depth. Visual observations indicated the layer of heavily hydrocarbon impacted soil was contiguous throughout the length of the soil investigation trench and appears to be historical and not associated with the High Sierra Release. A soil sample (East Trench @ 2.5') was collected for analysis at approximately two and one half (2.5) feet bgs and approximately ten (10) feet east of the east sidewall of the excavation. The analytical results indicated the benzene concentration of soil sample East Trench @ 2.5' was 4.12 mg/Kg, the BTEX concentration was 174.92 mg/Kg and the TPH concentration was 27,030 mg/Kg. Following the excavation of the investigation trench, an NMOCD Representative, who

was present during the February 24, 2014 excavation activities, granted permission to backfill the investigation trench based on safety concerns.

4.0 REMEDIATION SUMMARY CONCLUSIONS

Based on the analytical results of confirmation soil samples and visual observations at the Release Site, the New Mexico Oil Conservation Division Hobbs District Office representative determined the areas of impacted soil observed to the east of the excavation and along the investigation trench were not associated with the High Sierra Hobbs Station (Carpenter Station) incident which occurred on November 20, 2013.

NOVA recommends High Sierra Transportation submit a copy of this Remediation Summary to the NMOCD Hobbs District Office and request Closure Status for this release.

5.0 LIMITATIONS

NOVA Safety and Environmental has prepared this Remediation Summary to the best of its ability. No other warranty, expressed or implied, is made or intended.

NOVA Safety and Environmental has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA Safety and Environmental 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. NOVA Safety and Environmental has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA Safety and Environmental 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 High Sierra Transportation. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of NOVA Safety and Environmental and/or High Sierra Transportation.

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6.0 **DISTRIBUTION:**

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- Copy 1: Geoffrey Leking New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division (District 1) 1625 French Drive Hobbs, New Mexico 88240
- Copy 2: Craig Rutland High Sierra Transportation 3773 Cherry Creek North Drive, Suite 1000 Denver, Colorado 80209
- Copy 3: NOVA Safety & Environmental 2057 Commerce Street Midland, Texas 79703





TABLE 1

CONCENTRATIONS OF BTEX AND TPH IN SOIL

HIGH SIERRA TRANSPORTATION HOBBS STATION (CARPENTER STATION) LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/Kg

		100 100			WETHODS. SU	U 046 00116				METUOD	CUV OUTEM	Γ
	SAMPLE	SOIL			METHODS: 34	01700-040			TPH	TPH	HdL	TOTAL
SAMPLE LOCATION	DATE	STATUS	BENZENE	TOLUENE	ETHYL-	m, p -	- 0	TOTAL	GRO	DRO	ORO	TPH
				Day and	BENZENE	XYLENES	XYLENE	BIEN	C6-C12	C12-C28	C28-C35	C6-C35
NMOCD Regulatory (Guidelines		10	•	•			50	•	•	ı.	100
Sample Point 1	11/26/13	Excavated							<27.8	164	<27.8	164
Sample Point 2	11/26/13	In-Situ	<0.00116	<0.00233	<0.00116	0.00251	<0.00116	0.00251	<29.1	30.5	<29.1	30.5
Sample Point 3	11/26/13	In-Situ	<0.00112	<0.00225	<0.00112	0.0307	0.0144	0.0451	<28.1	36.8	<28.1	36.8
Sample Point 4	11/26/13	Excavated			-			-	9230	18200	2570	30,000
					Start Start	and the second	Sala and				N.N. TANK	1000
Sample Point 1-A	12/02/13	In-Situ	<0.00100	<0.00220	0.00130	0.00560	0.00143	0.00833	<27.5	<27.5	<27.5	<27.5
Sample Point 4 Exc. WW	12/02/13	In-Situ	<0.00109	<0.00217	<0.00109	<0.00217	<0.00109	<0.00217	<27.2	<27.2	<27.2	<27.2
Sample Point 4 Exc. SW	12/02/13	In-Situ	<0.00108	0.00341	0.00867	0.0481	0.0124	0.07258	<26.9	84.7	<26.9	84.7
Sample Point 4 Exc. EW	12/02/13	Excavated							98.2	615	67.6	781
Sample Point 4 Exc. NW	12/02/13	In-Situ	<0.00109	<0.00217	<0.00109	<0.00217	<0.00109	<0.00217	<27.2	<27.2	<27.2	<27.2
Sample Point 4-A (a) 3'	12/03/13	Excavated				- 200			128	1120	136	1,390
Sample Point 4 Expanded EXC BH@6'	02/24/14	In-Situ	<0.00110	<0.00220	0.00311	0.0110	0.00411	0.01822	<27.5	133	<27.5	133
Sample Point 4 Expanded EXC SW(@5'	02/24/14	In-Situ	0.0120	0.309	0.347	0.535	0.209	1.4120	220	1830	250	2,300
Sample Point 4 Expanded EXC WW(@5'	02/24/14	In-Situ	<0.00109	<0.00217	<0.00109	0.00324	<0.00109	0.00324	<27.2	86.9	<27.2	86.9
Sample Point 4 Expanded EXC EW @4'	02/24/14	In-Situ	<0.00109	0.00526	0.00320	0.0365	0.0229	0.06786	<27.2	181	28.2	209.2
Sample Point 4 Expanded EXC NW (05'	02/24/14	In-Situ	<0.00109	<0.00217	0.00205	0.0139	0.00591	0.02186	<27.2	110	<27.2	110
					the state of	the state of the	A PARTY AND	and the second			The second second	
East Trench @ 2.5'	02/24/14	In-Situ	4.12	44.2	41.4	61.8	23.4	174.92	7950	16400	2680	27,030

Page 1 of 1



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Photographic Documentation

Client: High Sierra Transportation Project Name: Hobbs Station (Carpenter Station)





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Photographic Documentation

Client: High Sierra Transportation Project Name: Hobbs Station (Carpenter Station)





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Photographic Documentation

Client: High Sierra Transportation Project Name: Hobbs Station (Carpenter Station)





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Client: High Sierra Transportation Project Name: Hobbs Station (Carpenter Station)





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Client: High Sierra Transportation Project Name: Hobbs Station (Carpenter Station)

Prepared by: NOVA Location: Lea County, New Mexico

Photograph No. 9 Date: February 24, 2014 Direction: Southwest **Description:** South Sidewall of **Sample Point 4** Expanded Excavation. Photograph No. 10 Date: February 24, 2014 Direction: **Down onto South** Sidewall of Investigation Trench **Description:** South Sidewall of investigation trench, exhibiting heavily impacted layer of soil outside of secondary containment.

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

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Analytical Report

Prepared for:

Curt Stanley Nova Safety & Environmental 2057 Commerce Street Midland, TX 79703

Project: High Sierra Project Number: Carpenter Station Location: Lea County, NM

Lab Order Number: 3K26003



NELAP/TCEQ # T104704156-13-3

Report Date: 12/02/13

Page 1 of 11

	ANALYTICAL REPORT	FOR SAMPLES	
Midland TX, 79703	Project Manager:	Curt Stanley	
2057 Commerce Street	Project Number:	Carpenter Station	
Nova Safety & Environmental	Project:	High Sierra	Fax: (432) 520-7701

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Sample Point 1	3K26003-01	Soil	11/26/13 12:30	11-26-2013 16:02
Sample Point 2	3K26003-02	Soil	11/26/13 12:35	11-26-2013 16:02
Sample Point 3	3K26003-03	Soil	11/26/13 12:40	11-26-2013 16:02
Sample Point 4	3K26003-04	Soil	11/26/13 12:45	11-26-2013 16:02

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C6-C35

Project: High Sierra Project Number: Carpenter Station Project Manager: Curt Stanley

Sample Point 1 3K26003-01 (Soil) Analyte Reporting Limit Units Dilution Batch Prepared Analyzed Permian Basin Environmental Lab, L.P. General Chemistry Parameters by EPA / Standard Methods % Moisture 10.0 0.1 % 1 P3K2702 11/27/13 11/27/13 Cef-C12 ND 27.8 mg/kg dry 1 P3K2701 11/26/13 11/26/13 >C12-C28 164 27.8 mg/kg dry 1 P3K2701 11/26/13 11/26/13 >C28-C35 ND 27.8 mg/kg dry 1 P3K2701 11/26/13 11/26/13 Surrogate: 1-Chlorooctane 102 % 70-130 P3K2701 11/26/13 11/26/13 Surrogate: o-Terphenyl 93.8 % 70-130 P3K2701 11/26/13 11/26/13										
Analyte		Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		Pern	nian Basin I	Environmen	tal Lab,	L.P.				
General Chemistry Parameter	s by EPA / Sta	ndard Method	ls		in the		B. W.		1.1.1	
% Moisture		10.0	0.1	%	1	P3K2702	11/27/13	11/27/13	% calculation	
Total Petroleum Hydrocarbon	s C6-C35 by E	PA Method 8	015M		1		1.		11. 1	
C6-C12		ND	27.8	mg/kg dry	1	P3K2701	11/26/13	11/26/13	TPH 8015M	
>C12-C28		164	27.8	mg/kg dry	1	P3K2701	11/26/13	11/26/13	TPH 8015M	
>C28-C35		ND	27.8	mg/kg dry	1	P3K2701	11/26/13	11/26/13	TPH 8015M	
Surrogate: 1-Chlorooctane			102 %	70-1.	30	P3K2701	11/26/13	11/26/13	TPH 8015M	100
Surrogate: o-Terphenyl			93.8 %	70-1.	30	P3K2701	11/26/13	11/26/13	TPH 8015M	
Total Petroleum Hydrocarbon		164	83.3	mg/kg dry	1	[CALC]	11/26/13	11/26/13	calc	

Permian Basin Environmental Lab, L.P.

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.

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

Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703		Proj Project Num Project Mana;	ect: High Sid per: Carpento ger: Curt Sta	erra er Station nley				Fax: (432) 5	20-7701
		Sam 3K26	ple Point 2 003-02 (Soi	:))					
Analyte I	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pe	rmian Basin E	nvironmen	tal Lab, 1	L.P.				
Organics by GC	4		4.3				12. 4	Esta and	
Benzene	ND	0.00116	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Toluene	ND	0.00233	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Ethylbenzene	ND	0.00116	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Xylene (p/m) 0.0	0251	0.00233	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Xylene (o)	ND	0.00116	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		84.6 %	75-12	25	P3L0201	11/27/13	11/27/13	EPA 8021B	5.
Surrogate: 1,4-Difluorobenzene		78.3 %	75-12	25	P3L0201	11/27/13	11/27/13	EPA 8021B	
General Chemistry Parameters by EPA / Standar	d Meth	ods	19				1.61	Sec.	
% Moisture	14.0	0.1	%	1	P3K2702	11/27/13	11/27/13	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA M	Iethod	8015M	61 12		14-50 C		Sec. 1	A Charles	
C6-C12	ND	29.1	mg/kg dry	1	P3K2701	11/26/13	11/26/13	TPH 8015M	
>C12-C28	30.5	29.1	mg/kg dry	1	P3K2701	11/26/13	11/26/13	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P3K2701	11/26/13	11/26/13	TPH 8015M	
Surrogate: 1-Chlorooctane		85.6 %	70-13	0	P3K2701	11/26/13	11/26/13	TPH 8015M	
Surrogate: o-Terphenyl		76.9 %	70-13	0	P3K2701	11/26/13	11/26/13	TPH 8015M	

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703		Proj Project Num Project Mana	ect: High Sie ber: Carpente ger: Curt Star	rra er Station hley				Fax: (432) 52	0-7701
		Sam 3K26	ple Point 3 003-03 (Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Peri	nian Basin F	Invironment	al Lab,	L. P.				
Organics by GC		1.19	-					4-32-0B	
Benzene	ND	0.00112	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Toluene	ND	0.00225	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Ethylbenzene	ND	0.00112	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Xylene (p/m)	0.0307	0.00225	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Xylene (o)	0.0144	0.00112	mg/kg dry	1	P3L0201	11/27/13	11/27/13	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		106 %	75-12	5	P3L0201	11/27/13	11/27/13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		83.3 %	75-12	5	P3L0201	11/27/13	11/27/13	EPA 8021B	
General Chemistry Parameters by EPA	/ Standard Metho	ds							1
% Moisture	11.0	0.1	%	1	P3K2702	11/27/13	11/27/13	% calculation	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M	N	Sich				The States	
C6-C12	ND	28.1	mg/kg dry	1	P3K2701	11/26/13	11/26/13	TPH 8015M	
>C12-C28	36.8	28.1	mg/kg dry	1	P3K2701	11/26/13	11/26/13	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P3K2701	11/26/13	11/26/13	TPH 8015M	
Surrogate: 1-Chlorooctane	1. S.	88.5 %	70-13	0	P3K2701	11/26/13	11/26/13	TPH 8015M	1
Surrogate: o-Terphenyl		82.2 %	70-13	0	P3K2701	11/26/13	11/26/13	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	84.3	mg/kg dry	1	[CALC]	11/26/13	11/26/13	calc	

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								4. 3	
Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703		Proj Project Num Project Mana	ject: High Si ber: Carpent ger: Curt Sta	erra er Station nley				Fax: (432) 52	20-7701
		Sam 3K26	ple Point 6003-04 (Soi	4 1)					14
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
General Chemistry Parameters by EF % Moisture	A / Standard Metho 16.0	ds 0.1	%	1	P3K2702	11/27/13	11/27/13	% calculation	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 8	015M							
C6-C12	9230	298	mg/kg dry	10	P3K2701	11/26/13	11/26/13	TPH 8015M	1.
>C12-C28	18200	298	mg/kg dry	10	P3K2701	11/26/13	11/26/13	TPH 8015M	
>C28-C35	2570	298	mg/kg dry	10	P3K2701	11/26/13	11/26/13	TPH 8015M	
Surrogate: 1-Chlorooctane		120 %	70-1.	30	P3K2701	11/26/13	11/26/13	TPH 8015M	
Surrogate: o-Terphenyl		92.4 %	70-1.	30	P3K2701	11/26/13	11/26/13	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	30000	893	mg/kg dry	10	[CALC]	11/26/13	11/26/13	calc	

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703

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Project: High Sierra Project Number: Carpenter Station Project Manager: Curt Stanley

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ratch P3I 0201 - Ceneral Prenaration (CC)										
Date 1 52.0201 - General 1 reparation (GC)				D 10		11/07/12		-	1.1.2	14.3 X
Blank (P3L0201-BLK1)				Prepared &	Analyzed:	11/27/13				
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	48.7		ug/kg	60.0		81.2	75-125			
Surrogate: 4-Bromofluorobenzene	61.7		"	60.0		103	75-125			
LCS (P3L0201-BS1)				Prepared &	Analyzed:	11/27/13			1214	
Benzene	0.110	0.00100	mg/kg wet	0.100	-	110	80-120		1.5	17-12 - 1-1-1
Toluene	0.0966	0.00200	"	0.100		96.6	80-120			
Ethylbenzene	0.0936	0.00100	"	0.100		93.6	80-120			
Xylene (p/m)	0.210	0.00200	"	0.200		105	80-120			
Xylene (o)	0.0946	0.00100		0.100		94.6	80-120			
Surrogate: 4-Bromofluorobenzene	66.9		ug/kg	60.0		112	75-125		1.10	
Surrogate: 1,4-Difluorobenzene	52.5		"	60.0		87.5	75-125			
LCS Dup (P3L0201-BSD1)				Prepared &	Analyzed:	11/27/13				
Benzene	0.113	0.00100	mg/kg wet	0.100		113	80-120	2.31	20	19
Toluene	0.0945	0.00200	"	0.100		94.5	80-120	2.20	20	
Ethylbenzene	0.0915	0.00100		0.100		91.5	80-120	2.23	20	
Xylene (p/m)	0.205	0.00200	"	0.200		103	80-120	2.35	20	
Xylene (o)	0.0928	0.00100		0.100		92.8	80-120	1.88	20	
Surrogate: 1,4-Difluorobenzene	50.1		ug/kg	60.0		83.4	75-125		4.4	6 C C
Surrogate: 4-Bromofluorobenzene	65.4		"	60.0		109	75-125			

Permian Basin Environmental Lab, L.P.

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703		Project: High Sierra Project Number: Carpenter Station Project Manager: Curt Stanley								520-7701
General	Chemistry Para Perm	ameters by nian Basin	EPA / Enviro	Standard nmental l	l Methoo Lab, L.P	ls - Qua	lity Con	trol		
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3K2702 - General Preparatio	n (Prep)	1. 194. Y	1.5		Sec.	-				1.4
Blank (P3K2702-BLK1)				Prepared &	& Analyzed:	11/27/13				
6 Moisture	ND	0.1	%		1.1.2.1		1.00			
Duplicate (P3K2702-DUP1)	Sou	Source: 3K26001-01 Prepared & Analyzed: 11/27/13								

% Moisture

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0.1 %

8.0

8.0

0.00 20

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703 Project: High Sierra Project Number: Carpenter Station Project Manager: Curt Stanley

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

Permian Basin E	Invironmental	Lab,	L.P.
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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3K2701 - TX 1005	1.1				P				14	Sec. 1
Blank (P3K2701-BLK1)				Prepared &	Analyzed:	11/26/13				
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0								
>C28-C35	ND	25.0								
Surrogate: 1-Chlorooctane	79.8		"	100		79.8	70-130			
Surrogate: o-Terphenyl	36.1		"	50.0		72.3	70-130			
LCS (P3K2701-BS1)				Prepared &	Analyzed:	11/26/13				
C6-C12	857	25.0	mg/kg wet	1000	14.	85.7	75-125			
>C12-C28	967	25.0		1000		96.7	75-125			
Surrogate: 1-Chlorooctane	95.1		"	100		95.1	70-130			
Surrogate: o-Terphenyl	38.3		"	50.0		76.6	70-130			
LCS Dup (P3K2701-BSD1)				Prepared &	Analyzed:	11/26/13				
C6-C12	822	25.0	mg/kg wet	1000		82.2	75-125	4.14	20	2.3
>C12-C28	937	25.0	"	1000		93.7	75-125	3.19	20	
Surrogate: 1-Chlorooctane	91.1		"	100		91.1	70-130			1.17
Surrogate: o-Terphenyl	37.3		"	50.0		74.6	70-130			
Matrix Spike (P3K2701-MS1)	Se	urce: 3K2600	1-01	Prepared &	Analyzed:	11/26/13				
C6-C12	1030	27.2	mg/kg dry	1090	165	79.7	75-125		SI - 3 ×	198.2.16
>C12-C28	1740	27.2	"	1090	1140	55.1	75-125			QM-0
Surrogate: 1-Chlorooctane	102		"	109		93.5	70-130		-	157 E V
Surrogate: o-Terphenyl	45.6		"	54.3		84.0	70-130			
Matrix Spike Dup (P3K2701-MSD1)	Se	ource: 3K2600	1-01	Prepared &	Analyzed:	11/26/13	41		1 1.	A
C6-C12	1070	27.2	mg/kg dry	1090	165	83.7	75-125	4.91	20	2 States and
>C12-C28	1860	27.2		1090	1140	66.4	75-125	18.5	20	QM-0
Surrogate: 1-Chlorooctane	105		n	109	5	96.7	70-130		-	4400
Surrogate: o-Terphenyl	42.4		"	54.3		77.9	70-130			

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Nova Safe 2057 Con Midland T	ety & Environmental amerce Street TX, 79703	Project: Project Number: Project Manager:	High Sierra Carpenter Station Curt Stanley	Fax: (432) 520-7701
		Notes and De	finitions	
QM-05	The spike recovery was outside accepta within acceptance limits showing that the	nce limits for the MS and/or MS he laboratory is in control and the	D due to matrix interference. The LCS an e data is acceptable.	d/or LCSD were
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above the r	eporting limit		
NR	Not Reported			
dry	Sample results reported on a dry weight bas	s		
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dup	Duplicate			

Report Approved By:

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Bun Barron

Date:

12/2/2013

Brent Barron, Laboratory Director/Technical Director

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

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



Analytical Report

Prepared for:

Curt Stanley Nova Safety & Environmental 2057 Commerce Street Midland, TX 79703

Project: High Sierra Project Number: Carpenter Station Location: Lea County, NM

Lab Order Number: 3L04001



NELAP/TCEQ # T104704156-13-3

Report Date: 12/11/13

Nova Safety & Environmental	Project: High Sierra	Fax: (432) 520-770
2057 Commerce Street	Project Number: Carpenter Station	
Midland TX, 79703	Project Manager: Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Sample Point 1-A	3L04001-01	Soil	12/02/13 11:00	12-04-2013 10:56
Sample Point 4 Exc. WW	3L04001-02	Soil	12/02/13 13:00	12-04-2013 10:56
Sample Point 4 Exc. SW	3L04001-03	Soil	12/02/13 13:05	12-04-2013 10:56
Sample Point 4 Exc.EW	3L04001-04	Soil	12/02/13 13:10	12-04-2013 10:56
Sample Point 4 Exc. NW	3L04001-05	Soil	12/02/13 13:20	12-04-2013 10:56
Sample Point 4-A @ 3'	3L04001-06	Soil	12/03/13 11:00	12-04-2013 10:56

Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703

Surrogate: 1-Chlorooctane

Total Petroleum Hydrocarbon C6-C35

Surrogate: o-Terphenyl

Project: High Sierra Project Number: Carpenter Station Project Manager: Curt Stanley

Sample Point 1-A

Fax: (432) 520-7701

Notes

S-GC

		3L04	001-01 (Soil)					Sec. St.	a.,
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	
	Perr	nian Basin E	Invironments	al Lab, I	L.P.				
Organics by GC		1.25	197	1394			1. 1.	Flan	
Benzene	ND	0.00110	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Toluene	ND	0.00220	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Ethylbenzene	0.00130	0.00110	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Xylene (p/m)	0.00560	0.00220	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Xylene (o)	0.00143	0.00110	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		129 %	75-125	5	P3L1102	12/10/13	12/10/13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		82.9 %	75-125	5	P3L1102	12/10/13	12/10/13	EPA 8021B	
General Chemistry Parameters by E	CPA / Standard Metho	ds	1.1.2	1				The is	
% Moisture	9.0	0.1	%	1	P3L0501	12/05/13	12/05/13	% calculation	
Total Petroleum Hydrocarbons C6-	C35 by EPA Method 8	015M	in the second						
C6-C12	ND	27.5	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	

101 %

92.4 %

82.4 mg/kg dry

ND

70-130

70-130

1

P3L0502

P3L0502

[CALC]

12/04/13

12/04/13

12/04/13

12/04/13

12/04/13

12/04/13

TPH 8015M

TPH 8015M

calc

Permian Basin Environmental Lab, L.P.

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Nova Safety & Environmental		Proj	ect: High Sie	erra				Fax: (432) 52	20-7701
2057 Commerce Street		Project Num	ber: Carpente	er Station					
Midland TX, 79703		Project Mana	ger: Curt Sta	nley					
		Sample P	oint 4 Exc.	ww					
		31.04	001-02 (Soil)					-
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Per	mian Basin E	Invironmen	tal Lab,]	L.P.				
Organics by GC			3					and the second	
Benzene	ND	0.00109	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Toluene	ND	0.00217	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		74.6 %	75-12	25	P3L1102	12/10/13	12/10/13	EPA 8021B	S-GO
Surrogate: 4-Bromofluorobenzene		86.8 %	75-12	25	P3L1102	12/10/13	12/10/13	EPA 8021B	
General Chemistry Parameters by EPA	/ Standard Metho	ods	S. A.				1		
% Moisture	8.0	0.1	%	1	P3L0501	12/05/13	12/05/13	% calculation	
Total Petroleum Hydrocarbons C6-C35	by EPA Method	8015M	a state					Set Chan	
C6-C12	ND	27.2	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
Surrogate: 1-Chlorooctane		100 %	70-13	30	P3L0502	12/04/13	12/04/13	TPH 8015M	
Surrogate: o-Terphenyl		89.8 %	70-13	30	P3L0502	12/04/13	12/04/13	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	81.5	mg/kg dry	1	[CALC]	12/04/13	12/04/13	calc	

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703		Proj Project Num Project Mana	ect: High Sier ber: Carpenter ger: Curt Stan	rta r Station ley				Fax: (432) 52	20-7701
		Sample I 3L04	Point 4 Exc. 001-03 (Soil)	SW					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Per	mian Basin H	Environment	al Lab, l	L.P.				
Organics by GC		1 2 2			2.		in the second	-	
Benzene	ND	0.00108	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Toluene	0.00341	0.00215	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Ethylbenzene	0.00867	0.00108	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Xylene (p/m)	0.0481	0.00215	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Xylene (o)	0.0124	0.00108	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		78.2 %	75-12:	5	P3L1102	12/10/13	12/10/13	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		105 %	75-12:	5	P3L1102	12/10/13	12/10/13	EPA 8021B	
General Chemistry Parameters by E	PA / Standard Metho	ods	1		S. CR.				
% Moisture	7.0	0.1	%	1	P3L0501	12/05/13	12/05/13	% calculation	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 8	3015M		1.1.1					
C6-C12	ND	26.9	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C12-C28	84.7	26.9	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
Surrogate: 1-Chlorooctane		100 %	70-130)	P3L0502	12/04/13	12/04/13	TPH 8015M	
Surrogate: o-Terphenyl		92.4 %	70-130)	P3L0502	12/04/13	12/04/13	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	84.7	80.6	mg/kg dry	1	[CALC]	12/04/13	12/04/13	calc	

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703		Proj Project Num Project Mana	ect: High Sierr ber: Carpenter ger: Curt Stanl	ra Station ey				Fax: (432) 52	20-7701
		Sample 1 3L04	Point 4 Exc.) 001-04 (Soil)	EW					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
General Chemistry Parameters by EP % Moisture	A / Standard Metho 12.0	ds 0.1	%	1	P3L0501	12/05/13	12/05/13	% calculation	
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 8	015M	Sec. 1 St	1					
C6-C12	98.2	28.4	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	- 5
>C12-C28	615	28.4	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C28-C35	67.6	28.4	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
Surrogate: 1-Chlorooctane		100 %	70-130		P3L0502	12/04/13	12/04/13	TPH 8015M	
Surrogate: o-Terphenyl		91.9%	70-130		P3L0502	12/04/13	12/04/13	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	781	85.2	mg/kg dry	1	[CALC]	12/04/13	12/04/13	calc	

Permian Basin Environmental Lab, L.P.

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703	Project: High Sierra Project Number: Carpenter Station Project Manager: Curt Stanley								20-7701
		Sample F 3L04	Point 4 Exc. 001-05 (Soil	. NW)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Invironment	al Lab, I	L.P.				
Organics by GC				1.	1.1				
Benzene	ND	0.00109	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Toluene	ND	0.00217	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P3L1102	12/10/13	12/10/13	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		97.5 %	75-12	5	P3L1102	12/10/13	12/10/13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		86.7 %	75-12	5	P3L1102	12/10/13	12/10/13	EPA 8021B	
General Chemistry Parameters by EPA	/ Standard Metho	ds					a start	A share	
% Moisture	8.0	0.1	%	1	P3L0501	12/05/13	12/05/13	% calculation	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M			5. A.				
C6-C12	ND	27.2	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
Surrogate: 1-Chlorooctane		87.8 %	70-13	0	P3L0502	12/04/13	12/04/13	TPH 8015M	1.
Surrogate: o-Terphenyl		80.5 %	70-13	0	P3L0502	12/04/13	12/04/13	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	81.5	mg/kg dry	1	[CALC]	12/04/13	12/04/13	calc	

Permian Basin Environmental Lab, L.P.

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Nova Safety & Environmental		Pro	ect: High Sie	erra				Fax: (432) 52	20-7701
2057 Commerce Street		Project Num	ber: Carpent	er Station					
Midland TX, 79703		Project Mana	ger: Curt Sta	nley		1.0			
		Sample	Point 4-A	@ 3'					
		3L04	001-06 (Soi	1)		1.			
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Moisture	8.0	0.1	%	1	P3L0501	12/05/13	12/05/13	% calculation	
% Moisture	8.0	0.1	%	1	P3L0501	12/05/13	12/05/13	% calculation	
<u>Fotal Petroleum Hydrocarbons C6-C3</u>	35 by EPA Method 80	015M							
C6-C12	128	27.2	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C12-C28	1120	27.2	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
>C28-C35	136	27.2	mg/kg dry	1	P3L0502	12/04/13	12/04/13	TPH 8015M	
Surrogate: 1-Chlorooctane		101 %	70-1.	30	P3L0502	12/04/13	12/04/13	TPH 8015M	
Surrogate: o-Terphenyl		98.6 %	70-1.	30	P3L0502	12/04/13	12/04/13	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	1390	81.5	mg/kg dry	1	[CALC]	12/04/13	12/04/13	calc	

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Nova Safety & Environmental
2057 Commerce Street
Midland TX 79703

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Project: High Sierra Project Number: Carpenter Station 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 P3L1102 - General Preparation (GC)							The second			
Blank (P3L1102-BLK1)				Prepared &	2 Analyzed:	12/10/13				
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	60.3		ug/kg	60.0		101	75-125		. 5	
Surrogate: 1,4-Difluorobenzene	48.5		"	60.0		80.8	75-125			
LCS (P3L1102-BS1)				Prepared &	& Analyzed:	12/10/13				
Benzene	0.112	0.00100	mg/kg wet	0.100	1.000	112	80-120		1.1	
Toluene	0.113	0.00200		0.100		113	80-120			
Ethylbenzene	0.118	0.00100		0.100		118	80-120			
Xylene (p/m)	0.218	0.00200		0.200		109	80-120			
Xylene (o)	0.0949	0.00100		0.100		94.9	80-120			
Surrogate: 1,4-Difluorobenzene	57.7		ug/kg	60.0		96.2	75-125			
Surrogate: 4-Bromofluorobenzene	84.9		"	60.0		142	75-125			S-GO
LCS Dup (P3L1102-BSD1)				Prepared &	& Analyzed:	12/10/13				
Benzene	0.118	0.00100	mg/kg wet	0.100		118	80-120	5.68	20	
Toluene	0.104	0.00200	"	0.100		104	80-120	8.29	20	
Ethylbenzene	0.119	0.00100	"	0.100		119	80-120	0.649	20	
Xylene (p/m)	0.229	0.00200		0.200		114	80-120	4.89	20	
Xylene (o)	0.0975	0.00100		0.100		97.5	80-120	2.78	20	
Surrogate: 4-Bromofluorobenzene	78.9	y	ug/kg	60.0		131	75-125	11.1		S-GC
Surrogate: 1.4-Difluorobenzene	49.3		"	60.0		82.1	75-125			

Permian Basin Environmental Lab, L.P.

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Fax: (432) 520-7701 Nova Safety & Environmental Project: High Sierra Project Number: Carpenter Station 2057 Commerce Street Midland TX, 79703 Project Manager: Curt Stanley General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P. %REC RPD Reporting Spike Source Result Limit Level Result %REC Limits RPD Limit Notes Analyte Units

Batch P3L0501 - *** DEFAULT PREP **	*			a ser a s			1
Blank (P3L0501-BLK1)		1		Prepared & Analyzed: 12/05/13			a i a
% Moisture	ND	0.1	%				14
Duplicate (P3L0501-DUP1)	Source: 3L03001-01		Prepared & Analyzed: 12/05/13				
% Moisture	3.0	0.1	%	3.0	0.00	20	

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703

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Project: High Sierra Project Number: Carpenter Station Project Manager: Curt Stanley

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

Permian Basin Environmental Lab, L.P.

Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
	24	1. 1	a la la			e Eg			5
			Prepared &	Analyzed:	12/04/13			1.	~
ND	25.0	mg/kg wet				1	1.1	1	
ND	25.0								
ND	25.0								
94.0		"	100		94.0	70-130			
47.5		"	50.0		94.9	70-130			
		A. S	Prepared &	Analyzed:	12/04/13				
922	25.0	mg/kg wet	1000		92.2	75-125			
1000	25.0	"	1000		100	75-125			
102		"	100		102	70-130			
43.3		"	50.0		86.6	70-130			
			Prepared &	Analyzed:	12/04/13				
947	25.0	mg/kg wet	1000		94.7	75-125	2.68	20	19 A. A.
1020	25.0		1000		102	75-125	1.82	20	
105		"	100		105	70-130	6		
43.4		"	50.0		86.8	70-130			
	Result ND ND 94.0 47.5 922 1000 102 43.3 947 1020 105 43.4	Reporting Result Limit ND 25.0 ND 25.0 ND 25.0 94.0 47.5 922 25.0 1000 25.0 102 43.3 947 25.0 1020 25.0 105 43.4	Reporting Limit Units ND 25.0 mg/kg wet ND 25.0 " ND 25.0 " ND 25.0 " 94.0 " 47.5 " 922 25.0 mg/kg wet 1000 25.0 " 922 25.0 mg/kg wet 1000 25.0 " 102 " " 43.3 " 102 103 103 103 103 104 105 105 105 105 105 105 105 105 105 105 105 105 105 105 105 105 105 105 105 10	Reporting Result Spike Limit Spike Level ND 25.0 mg/kg wet ND 25.0 " ND 25.0 " ND 25.0 " 94.0 " 100 47.5 " 50.0 922 25.0 mg/kg wet 1000 25.0 " 1000 25.0 " 922 25.0 mg/kg wet 1000 25.0 " 1000 25.0 " 1000 25.0 " 1000 25.0 " 1002 " 1000 1020 25.0 " 947 25.0 mg/kg wet 1000 1020 25.0 " 1001 1020 25.0 " 1000 1000 1000 1000 105 " 1000 43.4 " 50.0	Reporting Result Spike Limit Source Result Result Limit Units Level Result Prepared & Analyzed: ND 25.0 mg/kg wet ND 25.0 "	Result Reporting Limit Spike Units Source Result Source Result %REC Prepared & Analyzed: 12/04/13 Prepared & Analyzed: 12/04/13 Prepared & Analyzed: 12/04/13 ND 25.0 mg/kg wet Prepared & Analyzed: 12/04/13 ND 25.0 " Prepared & Analyzed: 12/04/13 94.0 " 100 94.0 47.5 " 50.0 94.9 Prepared & Analyzed: 12/04/13 Prepared & Analyzed: 12/04/13 100 922 25.0 mg/kg wet 1000 92.2 1000 25.0 " 1000 102 43.3 " 50.0 & 86.6 Prepared & Analyzed: 12/04/13 947 25.0 mg/kg wet 1000 102 43.3 " 50.0 \$86.6 102 102 102 1020 25.0 " 1000 102 102 102 105 104 105 43.4 " 50.0 86.8 86.8 86.8 8	Reporting Result Keporting Limit Spike Units Source Result %REC %REC ND 25.0 mg/kg wet ND 25.0 mg/kg wet ND 25.0 " %	Result Keporting Limit Spike Units Source Result %REC /%REC %REC RPD Prepared & Analyzed: 12/04/13 ND 25.0 mg/kg wet RPD RPD RPD RPD RPD RPD	Reporting Result Reporting Limit Spike Units Source Result %REC %REC Limits RPD RPD RPD Limit ND 25.0 mg/kg wet

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Nova Saf 2057 Cor Midland	ety & Environmental mmerce Street TX, 79703	Project: Project Number: Project Manager:	Project: High Sierra Project Number: Carpenter Station Project Manager: Curt Stanley						
		Notes and De	finitions						
S-GC	Surrogate recovery outside of contro	l limits. The data was accepted base	ed on valid recovery of the remaining	surrogate.					
DET	Analyte DETECTED								
ND	Analyte NOT DETECTED at or above the	e 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								
Dun	Duplicate								

Report Approved By:

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Bur Barron Date:

12/11/2013

Brent Barron, Laboratory Director/Technical Director

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Religquis	Relingeis	Relinquis	Special				10.6	20%	104	-03	20-	101	LAB # (lab use only)							
hed by:		Jak Harbert	Instructions: Bill to				Sample Pint 4-	Sample Point 4 I	Sample Point 4 I	Sample Point 4 I	Sample Point 4 E	Sample Poin	FIELD COD	# 32040c	Sampler Signature:	Telephone No: (432)5	City/State/Zip: Midlan	Company Address: 2057 (Company Name Nova	Project Manager: Curt S
Date	10-14/17	12/2/13	NOVA				A @ 3'	Exc. NW	Exc. EW	Exc. SW	Exc. WW	t 1-A	m	24	K	all	Id/TX/79703	Commerce Dr.	Safety and Environn	tanley
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	ne	29	1. 192	-			f	F	F	-	F	F	TPH: TX 1005 TX 1006			orma	P	ect I	rojec	tNa
Reo	San	Cus	San										Cations (Ca, Mg, Na, K)			я	#	00	**	me
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iture 1:	Hand	n co seal seal	ory C Cont ee b				+	+	-	-	-	-	SAR / ESP / CEC	F.	2	stand			1	1.1
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J'B'	UF	cont cont	dspi U S	-			-	+	1	+	+	+	Semivolatiles		Zel		1.	F	Ca	
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PERMIAN BASIN ENVIRONMENTAL LAB, LP 10014 SCR 1213 Midland, TX 79706



Analytical Report

Prepared for:

Curt Stanley Nova Safety & Environmental 2057 Commerce Street Midland, TX 79703

Project: High Sierra Transportation Project Number: Carpenter Station Location: Lea County, NM

Lab Order Number: 4B27001



NELAP/TCEQ # T104704156-13-3

Report Date: 02/28/14

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Nova Safety & EnvironmentalProject: High Sierra TransportationFax: (432) 520-77012057 Commerce StreetProject Number: Carpenter StationMidland TX, 79703Project Manager: Curt Stanley

ANALYTICAL REPORT FOR SAMPLES

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Sample Point 4 Expanded EXC BH @ 6'	4B27001-01	Soil	02/24/14 11:30	02-27-2014 09:00
Sample Point 4 Expanded EXC SW @ 5'	4B27001-02	Soil	02/24/14 11:35	02-27-2014 09:00
Sample Point 4 Expanded EXC WW @ 5'	4B27001-03	Soil	02/24/14 11:40	02-27-2014 09:00
Sample Point 4 Expanded EXC EW @ 4'	4B27001-04	Soil	02/24/14 11:45	02-27-2014 09:00
Sample Point 4 Expanded EXC NW @ 5'	4B27001-05	Soil	02/24/14 11:50	02-27-2014 09:00

Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703

Project: High Sierra Transportation Project Number: Carpenter Station Project Manager: Curt Stanley

Sample Point 4 Expanded EXC BH @ 6' 4B27001-01 (Soil)

				-/					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin E	Invironmen	ital Lab, I	L. P.				
Organics by GC		1 28					10		and the
Benzene	ND	0.00110	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Foluene	ND	0.00220	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Ethylbenzene	0.00311	0.00110	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (p/m)	0.0110	0.00220	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (o)	0.00411	0.00110	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		121 %	75-1	25	P4B2803	02/27/14	02/28/14	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		88.7 %	75-1.	25	P4B2803	02/27/14	02/28/14	EPA 8021B	
General Chemistry Parameters by E	PA / Standard Method	ls					4		
% Moisture	9.0	0.1	%	1	P4B2801	02/27/14	02/28/14	% calculation	-
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	015M						i.	
C6-C12	ND	27.5	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
>C12-C28	133	27.5	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
Surrogate: 1-Chlorooctane		91.6%	70-1.	30	P4B2802	02/27/14	02/27/14	TPH 8015M	
Surrogate: o-Terphenyl		98.3 %	70-1.	30	P4B2802	02/27/14	02/27/14	TPH 8015M	
Fotal Petroleum Hydrocarbon C6-C35	133	82.4	mg/kg dry	1	[CALC]	02/27/14	02/27/14	calc	

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Nova Safety & Environmental		Proi	ect. High Sie	rra Transr	ortation			Fax: (432) 520-7701		
2057 Commerce Street		Project Num	her Carpente	r Station	ortation					
Midland TX 79703		Project Mana	ger: Curt Star	lev						
Midiald IX, 19105		Troject Mana	ger. Curt Dur	ney					6 - 12 - 14	
	Samp	le Point 4 E	xpanded E	XC SW	@ 5'					
		4B27	001-02 (Soil)	- mar	- 5. · V				
		Reporting			21- A.			100	100	
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	Peri	nian Basin H	Invironment	al Lab, l	L.P.					
Organics by GC			1					1.15		
Benzene	0.0120	0.00111	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B		
Toluene	0.309	0.00222	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B		
Ethylbenzene	0.347	0.00111	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B		
Xylene (p/m)	0.535	0.00222	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B		
Xylene (o)	0.209	0.00111	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B		
Surrogate: 1,4-Difluorobenzene		77.8 %	75-12	5	P4B2803	02/27/14	02/28/14	EPA 8021B		
Surrogate: 4-Bromofluorobenzene		88.8 %	75-12	5	P4B2803	02/27/14	02/28/14	EPA 8021B		
General Chemistry Parameters by EP	A / Standard Metho	ds	5. 19	June -						
% Moisture	10.0	0.1	%	1	P4B2801	02/27/14	02/28/14	% calculation		
Total Petroleum Hydrocarbons C6-C.	35 by EPA Method 8	015M	1		1.100			1.		
C6-C12	220	27.8	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M		
>C12-C28	1830	27.8	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M		
>C28-C35	250	27.8	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M		
Surrogate: 1-Chlorooctane		93.0 %	70-13	0	P4B2802	02/27/14	02/27/14	TPH 8015M		
Surrogate: o-Terphenyl		111 %	70-13	0	P4B2802	02/27/14	02/27/14	TPH 8015M		
Fotal Petroleum Hydrocarbon	2300	83.3	mg/kg dry	1	[CALC]	02/27/14	02/27/14	calc		
C6-C35										

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

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703			Fax: (432) 520-7701						
	Samp	ole Point 4 E 4B27	xpanded E2 001-03 (Soil)	KC WW	V @ 5'				8 A.
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Per	rmian Basin F	Invironment	al Lab, l	L. P.				
Organics by GC								The lite	200
Benzene	ND	0.00109	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Foluene	ND	0.00217	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (p/m)	0.00324	0.00217	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		90.7 %	75-125	5	P4B2803	02/27/14	02/28/14	EPA 8021B	13,77
Surrogate: 4-Bromofluorobenzene		108 %	75-125	5	P4B2803	02/27/14	02/28/14	EPA 8021B	
General Chemistry Parameters by E	PA / Standard Meth	ods	No.					1.1.1.	
% Moisture	8.0	0.1	%	1	P4B2801	02/27/14	02/28/14	% calculation	*
Fotal Petroleum Hydrocarbons C6-C	35 by EPA Method	8015M	5. C						the second
C6-C12	ND	27.2	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
>C12-C28	86.9	27.2	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
Surrogate: 1-Chlorooctane		87.5 %	70-130)	P4B2802	02/27/14	02/27/14	TPH 8015M	1
Surrogate: o-Terphenyl		92.4 %	70-130)	P4B2802	02/27/14	02/27/14	TPH 8015M	
Fotal Petroleum Hydrocarbon C6-C35	86.9	81.5	mg/kg dry	1	[CALC]	02/27/14	02/27/14	calc	

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703		Fax: (432) 520-7701							
	Sampl	e Point 4 E 4B27	xpanded E 001-04 (Soil	XC EW	' @ 4'				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	Perr	nian Basin H	Environment	tal Lab, I	L. P .				
Organics by GC			10				1.1.1	in the second	·
Benzene	ND	0.00109	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Toluene	0.00526	0.00217	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Ethylbenzene	0.00320	0.00109	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (p/m)	0.0365	0.00217	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (o)	0.0229	0.00109	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		85.4 %	75-12	5	P4B2803	02/27/14	02/28/14	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		138 %	75-12	5	P4B2803	02/27/14	02/28/14	EPA 8021B	S-GC
General Chemistry Parameters by El	PA / Standard Metho	ds	\$23 . N						
% Moisture	8.0	0.1	%	1	P4B2801	02/27/14	02/28/14	% calculation	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 8	015M	in the		1		2	Schene St.	
C6-C12	ND	27.2	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	1
>C12-C28	181	27.2	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
>C28-C35	28.2	27.2	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
Surrogate: 1-Chlorooctane		93.1 %	70-13	0	P4B2802	02/27/14	02/27/14	TPH 8015M	1.2.2.6
Surrogate: o-Terphenyl		102 %	70-13	0	P4B2802	02/27/14	02/27/14	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	209	81.5	mg/kg dry	1	[CALC]	02/27/14	02/27/14	calc	

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

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703		Fax: (432) 52	20-7701						
	Sampl	e Point 4 E 4B27	xpanded E 001-05 (Soil)	XC NW	/@5'				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin H	Environment	al Lab, I	L.P.				
Organics by GC				-		1.147	La de		
Benzene	ND	0.00109	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Toluene	ND	0.00217	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Ethylbenzene	0.00205	0.00109	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (p/m)	0.0139	0.00217	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (o)	0.00591	0.00109	mg/kg dry	1	P4B2803	02/27/14	02/28/14	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		130 %	75-12	5	P4B2803	02/27/14	02/28/14	EPA 8021B	S-GO
Surrogate: 1,4-Difluorobenzene		88.4 %	75-12:	5	P4B2803	02/27/14	02/28/14	EPA 8021B	
General Chemistry Parameters by E	PA / Standard Method	ls			5 A			1.	
% Moisture	8.0	0.1	%	1	P4B2801	02/27/14	02/28/14	% calculation	
Total Petroleum Hydrocarbons C6-C	C35 by EPA Method 8	015M	21. 1	1.			-	1.1.1.	1.1
C6-C12	ND	27.2	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	A. S.
>C12-C28	110	27.2	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P4B2802	02/27/14	02/27/14	TPH 8015M	
Surrogate: 1-Chlorooctane		90.9 %	70-130)	P4B2802	02/27/14	02/27/14	TPH 8015M	
Surrogate: o-Terphenyl		101 %	70-130)	P4B2802	02/27/14	02/27/14	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	110	81.5	mg/kg dry	1	[CALC]	02/27/14	02/27/14	calc	

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

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Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703

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Project: High Sierra Transportation Project Number: Carpenter Station 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 P4B2803 - General Preparation (GC)				4						
Blank (P4B2803-BLK1)				Prepared &	& Analyzed:	02/27/14	1.1			
Benzene	ND	0.00100	mg/kg wet	parte -		02/21/21				
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100								
Xylene (p/m)	ND	0.00200								
Xylene (o)	ND	0.00100								
Surrogate: 4-Bromofluorobenzene	64.9		ug/kg	60.0		108	75-125			
Surrogate: 1,4-Difluorobenzene	57.6		"	60.0		96.0	75-125			
LCS (P4B2803-BS1)				Prepared &	& Analyzed:	02/27/14				
Benzene	0.0859	0.00100	mg/kg wet	0.100		85.9	70-130			
Toluene	0.0962	0.00200		0.100		96.2	70-130			
Ethylbenzene	0.114	0.00100		0.100		114	70-130			
Xylene (p/m)	0.233	0.00200	"	0.200		116	70-130			
Xylene (o)	0.105	0.00100	"	0.100		105	70-130			
Surrogate: 4-Bromofluorobenzene	78.6		ug/kg	60.0		131	75-125			S-G(
Surrogate: 1,4-Difluorobenzene	60.5		"	60.0		101	75-125			
LCS Dup (P4B2803-BSD1)				Prepared &	& Analyzed:	02/27/14				
Benzene	0.0904	0.00100	mg/kg wet	0.100		90.4	70-130	5.17	20	
Toluene	0.100	0.00200	"	0.100		100	70-130	4.15	20	
Ethylbenzene	0.119	0.00100	"	0.100		119	70-130	3.89	20	
Xylene (p/m)	0.228	0.00200	"	0.200		114	70-130	2.22	20	
Xylene (o)	0.107	0.00100		0.100		107	70-130	2.00	20	
Surrogate: 1,4-Difluorobenzene	61.9		ug/kg	60.0		103	75-125		1.2.2	18-20
Surrogate: 4-Bromofluorobenzene	737		"	60.0		123	75-125			

Permian Basin Environmental Lab, L.P.

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

Nova Safety & Environmental		Project:	High Sierra Tra	nsportation				Fax: (432) 520-77				
2057 Commerce Street		Project Number: Carpenter Station										
Midland TX, 79703		Project Manager:	Curt Stanley									
General	Chemistry Para	meters by EPA	/ Standard	Method	ls - Oua	lity Con	trol					
General	Chemistry Para Perm	imeters by EPA ian Basin Envi	A / Standard ronmental I	Method Lab, L.P	ls - Qua	lity Con	trol					
General	Chemistry Para Perm	imeters by EPA ian Basin Envi Reporting	A / Standard ronmental I _{Spike}	Method Lab, L.P	ls - Qua	lity Con	trol	RPD				

Batch P4B2801 - *** DEFAULT PREP ***

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Blank (P4B2801-BLK1)			1	Prepared: 02/27/14 Analyzed: 02/28/14			
% Moisture	ND	0.1	%	1. "			
Duplicate (P4B2801-DUP1)	Source	: 4B27001-0)1	Prepared: 02/27/14 Analyzed: 02/28/14			
% Moisture	10.0	0.1	%	9.0	10.5	20	

Permian Basin Environmental Lab, L.P.

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Nova Safety & Environmental	Project: High Sierra Transportation	Fax: (432) 520-7701
2057 Commerce Street	Project Number: Carpenter Station	
Midland TX, 79703	Project Manager: Curt Stanley	

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 P4B2802 - TX 1005							5					
Blank (P4B2802-BLK1)				Prepared &	Analyzed:	02/27/14						
C6-C12	ND	25.0	mg/kg wet									
>C12-C28	ND	25.0	"									
>C28-C35	ND	25.0	"									
Surrogate: 1-Chlorooctane	101		mg/kg	100	1	101	70-130					
Surrogate: o-Terphenyl	53.3		"	50.0		107	70-130					
LCS (P4B2802-BS1)				Prepared &	Analyzed:	02/27/14						
C6-C12	1010	25.0	mg/kg wet	1000		101	75-125					
>C12-C28	1210	25.0	"	1000		121	75-125					
Surrogate: 1-Chlorooctane	108		mg/kg	100		108	70-130					
Surrogate: o-Terphenyl	52.8		"	50.0		106	70-130					
LCS Dup (P4B2802-BSD1)				Prepared &	Analyzed:	02/27/14						
C6-C12	1040	25.0	mg/kg wet	1000		104	75-125	2.37	20			
>C12-C28	1240	25.0	"	1000		124	75-125	2.69	20			
Surrogate: 1-Chlorooctane	111		mg/kg	100		111	70-130					
Surrogate: o-Terphenyl	52.6		"	50.0		105	70-130					
Duplicate (P4B2802-DUP1)	Source	ce: 4B27001	-01	Prepared: 02/27/14 Analyzed: 02/28/14								
C6-C12	ND	27.5	mg/kg dry	1. F	ND				20			
>C12-C28	111	27.5			133			18.6	20			
Surrogate: 1-Chlorooctane	109		mg/kg	100		109	70-130					
Surrogate: o-Terphenyl	58.4		"	50.0		117	70-130					

Permian Basin Environmental Lab, L.P.

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

Nova Sat 2057 Cor Midland	èty & Environmental nmerce Street TX, 79703	Project: High Sierra Transportation Project Number: Carpenter Station Project Manager: Curt Stanley		Fax: (432) 520-7701
		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 report	ng 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:

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Bun Barron

2/28/2014

Brent Barron, Laboratory Director/Technical Director

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

Permian Basin Environmental Lab, L.P.

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

Date:

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Relinquish	Relinquish	Relinquis	Þ	Special I				-05	-04	-03	-02	10	LAB # (lab use only)	ORDER	(lab use o					•		k
ed by: Date	ed by Dale 1	agent 221	3	nstructions:				Sample Point 4 Expanded Exc NW @ 5'	Sample Point 4 Expanded Exc EW @ 4'	Sample Point 4 Expanded Exc WW @ 5'	Sample Point 4 Expanded Exc SW @ 5'	Sample Point 4 Expanded Exc BH @ 6'	FIELD CODE	# 7527001	(VIII)	Sampler Signature:	Telephone No: (432)5207720	City/State/Zip: Midland/TX/79703	Company Address: 2057 Commerce Dr.	Company Name Nova Safety and Environn	Project Manager: Curt Stanley	
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ne	ne	D.C.	12.4	ſ									Ending Depth		C	L		1 .				
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ture	Imple	seal	e o	2	-		1°		-		-		Metals: As An Bs Cd Cr Ph Ha S		9.9		tand					P
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and the second se	M. Siet & La		1. 201.04		-			-	1	116		1	Otracked TAT						1	-	-	

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

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Analytical Report

Prepared for:

Curt Stanley Nova Safety & Environmental 2057 Commerce Street Midland, TX 79703

Project: High Sierra Transportation Project Number: Carpenter Station Location: Lea County, NM

Lab Order Number: 4B27002



NELAP/TCEQ # T104704156-13-3

Report Date: 02/28/14

East Trench @ 2.5' 4B27002-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin E	nvironmen	tal Lab, l	L.P.				
Organics by GC									
Benzene	4.12	0.112	mg/kg dry	100	P4B2803	02/27/14	02/28/14	EPA 8021B	
Toluene	44.2	0.225	mg/kg dry	100	P4B2803	02/27/14	02/28/14	EPA 8021B	
Ethylbenzene	41.4	0.112	mg/kg dry	100	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (p/m)	61.8	0.225	mg/kg dry	100	P4B2803	02/27/14	02/28/14	EPA 8021B	
Xylene (o)	23.4	0.112	mg/kg dry	100	P4B2803	02/27/14	02/28/14	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		89.0 %	75-1.	25	P4B2803	02/27/14	02/28/14	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		81.6 %	75-1.	25	P4B2803	02/27/14	02/28/14	EPA 8021B	
General Chemistry Parameters by EPA	/ Standard Method	ls							
% Moisture	11.0	0.1	%	1	P4B2801	02/27/14	02/28/14	% calculation	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	7950	281	mg/kg dry	10	P4B2802	02/27/14	02/27/14	TPH 8015M	
>C12-C28	16400	281	mg/kg dry	10	P4B2802	02/27/14	02/27/14	TPH 8015M	
>C28-C35	2680	281	mg/kg dry	10	P4B2802	02/27/14	02/27/14	TPH 8015M	
Surrogate: 1-Chlorooctane		129 %	70-1	30	P4B2802	02/27/14	02/27/14	TPH 8015M	
Surrogate: o-Terphenyl		104 %	70-1	30	P4B2802	02/27/14	02/27/14	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	27100	843	mg/kg dry	10	[CALC]	02/27/14	02/27/14	calc	

Permian Basin Environmental Lab, L.P.

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. Nova Safety & Environmental 2057 Commerce Street Midland TX, 79703

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Project: High Sierra Transportation Project Number: Carpenter Station Project Manager: Curt Stanley

General Chemistry Parameters by EPA / Standard Methods - Quality Control

sin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P4B2801 - *** DEFAULT PREP ***										
Blank (P4B2801-BLK1)				Prepared: 0	2/27/14 A	nalyzed: 02	/28/14			
% Moisture	ND	0.1	%							
Duplicate (P4B2801-DUP1)	Sour	rce: 4B27001-0)1	Prepared: 0	2/27/14 A	nalyzed: 02	/28/14			
% Moisture	10.0	0.1	%		9.0			10.5	20	

Permian Basin Environmental Lab, L.P.

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.

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

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