3R-1031

Release Report/ General Correspondence

Enterprise Trunk K #8

Date: 2015

OIL CONS. DIV DIST. 3

AUG 24 2015

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: Enterprise Field Services LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: **Trunk K #8 Release Site**	Facility Type: **Natural Gas Gathering Line**

Surface Owner:**BLM**	Mineral Owner:**BLM**	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	**25**	**27N**	**8W**	**1027**		**1462**		**San Juan**

Latitude 36.539789 Longitude -107.638800

NATURE OF RELEASE

Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release **5-10 BBLs Condensate**	Volume Recovered: **None**
Source of Release: Internal Corrosion/Failed Repair	Date and Hour of Occurrence: **2/18/2015 @ 2:00 p.m.**	Date and Hour of Discovery: **2/18/2015 @ 4:00 p.m.**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? Courtesy Notification: Cory Smith – NMOCD and Shari Ketcham - BLM	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: On February 18, 2015, during a routine leak survey, Enterprise discovered a release on the Trunk K pipeline. The pipeline was isolated and de-pressurized and lock out tag out was applied. No surface impacts were observed at the release location. Remediation of soil contamination was complete on May 12, 2015. A groundwater investigation was complete on June 26, 2015.

Describe Area Affected and Cleanup Action Taken.* The contaminant mass was removed by mechanical excavation. The final excavation measured approximately 25 feet long by 25 feet wide by 37 feet deep, where competent sandstone was encountered. Approximately 736 cubic yards of hydrocarbon impacted soil were excavated from the area of the identify release point and transported to a New Mexico Oil Conservation approved land farm facility. Contaminant concentrations remained above regulatory standards within the sandstone. A potassium permanganate solution was applied to the base of the excavation prior to backfilling. A groundwater investigation was conducted, confirming impacts to groundwater. A third party corrective action report is included with this "Final Soils" C-141.

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: Jon Fields	OIL CONSERVATION DIVISION
Printed Name: Jon Fields	Approved by Environmental Specialist:
Title: Director, Environmental	Approval Date: 9/4/15 Expiration Date:
E-mail Address:jefields@eprod.com	Conditions of Approval: GW Impacts confirmed Additional Rem Req via SANTA FE Soil Clean - 3RP- 1031 Attached ☐
Date: 8-21-2015 Phone: (713)381-6684	

* Attach Additional Sheets If Necessary

#NCS 1524735560

85

EXCAVATION AND CORING INVESTIGATION REPORT
TRUNK K #8 16 INCH NATURAL GAS PIPELINE RELEASE

UNIT N, SECTION 25, TOWNSHIP 27 NORTH, RANGE 8 WEST,
36.539789°, -107.638800°
SAN JUAN COUNTY, NEW MEXICO

July 31, 2015

Submitted To:
Enterprise Products Operating LLC
Field Environmental-San Juan Basin
614 Reilly Avenue
Farmington, NM 87401

Submitted By:
Souder, Miller & Associates
401 West Broadway
Farmington, NM 87401
(505) 325-7535

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1.0 Executive Summary

On behalf of Enterprise Products Operating, LLC. (Enterprise), SMA has prepared this excavation and coring investigation report to describe the collection of a core sample and the installation and sampling of one groundwater monitoring well for a hydrocarbon release associated with the 16-inch Trunk K pipeline release #8 excavation site. SMA's services were performed in general accordance with Enterprise's General Release Notification, Response and Remediation Plan. The coring and well installation served to further delineate the vertical extent of hydrocarbon impact to soils and to determine if any hydrocarbon contamination has come into contact with groundwater.

TABLE 1: RELEASE INFORMATION					
Name	Trunk K #8 Pipeline Release				
Location	Latitude/Longitude		Section, Township, Range		
	36.539789°	-107.638800°	SE/SW (Unit N)	Section 25	T27N, R8W
Date Reported to SMA	March 1, 2015				
Reported by	Tom Long				
Land Owner	Bureau of Land Management (BLM)				
Reported To	NM Oil Conservation Division (NMOCD) and BLM				
Diameter of Pipeline	16 inches				
Source of Release	Internal Corrosion and failed I-wrap repairs				
Release Contents	Natural Gas Liquids/Condensate				
Release Volume	Unknown				
Nearest Waterway	Adjacent to Largo Canyon Wash and within an unnamed Tributary Wash to Largo Canyon Wash				
Depth to Groundwater	40 feet BGS				
Nearest Domestic Water Source	Greater than 1,000 feet				
NMOCD Ranking	30				
SMA Response Dates	March 7 through June 26, 2015				
Subcontractors	Crossfire Services and Halo Services				
Disposal Facility	Envirotech				
Yd^3 Contaminated Soil Excavated and Disposed	736 (Reported as portion of attached C-138 forms)				

2.0 Introduction

The Trunk K #8 release was discovered simultaneously with 4 other leak locations on the Trunk K Pipeline, all associated with internal pipeline corrosion or failed carbon fiber I-Wraps installed in October of 2014. An unknown amount of natural gas and pipeline liquids were released. The Trunk K #8 pipeline release is located in (SE ¼ / SW ¼) Unit N, Section 25, Township 27 North, Range 8 West, 36.539789°, -107.638800°, San Juan County, New Mexico. Figure 1, Vicinity Map, illustrates the general location of the release.

New Mexico Oil Conservation Division Site Ranking

The release site is located in an unnamed tributary wash to Largo Canyon Wash on land managed by the Bureau of Land Management (BLM) with an elevation of approximately 6,004 feet above sea level. During the coring investigation activities, it was determined that depth to groundwater is approximately 40 feet below ground surface (bgs).

SMA searched the New Mexico Office of the State Engineer's (OSE) online water well data base for water wells in the vicinity of the release. No recorded wells were located within 1,000 feet of the site. One well was located within a 1 mile radius of the site. There is no anticipated impact to this well.

The physical location of this release is within the jurisdiction of the BLM and OCD. This release location has been assigned a OCD ranking of 30, which requires soil remediation action levels (RALs) of 10 parts per million (ppm) benzene, 50 ppm total benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 100 ppm total petroleum hydrocarbons (TPH).

Archaeological Survey Report

The location of the Trunk K #8 site was determined by BLM to be within an archaeological and culturally sensitive area. Enterprise contracted Western Cultural Resources Management (WCRM) of Farmington, NM to conduct a complete archaeological survey of the entire Trunk K pipeline right of way. The survey determined the majority of the right of way to be cleared of archaeological significant findings except for the area immediately surrounding the Trunk K #8 release location. Through coordination with the BLM, WCRM identified and delineated the area in order to protect and preserve the integrity of the archaeological site. A representative from WCRM was on site during the repair and remediation activities at Trunk K #8. A copy of WCRM survey report is enclosed in Appendix D.

3.0 Summary of Field Activities

On March 1, 2015, Enterprise reported a leak on the Trunk K Pipeline to SMA. Excavation of the Trunk K #8 site began on March 7, 2015 and continued, periodically, through May 12, 2015 when the final closure sample was collected. The release was the result of internal pipeline corrosion.

Under the supervision and direction of SMA, Crossfire Services excavated and transported the hydrocarbon impacted soil for offsite disposal. The contaminated soil was transported to Envirotech Landfarm near Bloomfield, NM. Soil disposal documentation is included in Appendix B. The overall excavation measured 25 feet long and 25 feet wide with a maximum depth of 35 feet bgs. The excavation encountered competent sandstone bedrock from approximately 3 feet bgs to the total depth. No saturated soils were encountered during the excavation.

Closure sample collection dates were scheduled for May 1, 2015 with the BLM and the NMOCD. Neither party was present to witness the sample collection. Five, multi-aliquot composite samples were collected from the final excavation sidewalls and base using an excavator on May 1, 2015. Sample SC-5 Base @ 35' feet was above NMOCD Guideline remediation action levels (RALs) with a GRO concentration of 48 mg/Kg and a DRO concentration of 93 mg/Kg, resulting in a combined TPH concentration of 131 mg/Kg. All other samples were below NMOCD Guideline RALs.

On May 12, 2015 the location of sample SC-5 was further excavated to approximately 37 feet bgs. A composite sample was collected from this location, labeled SC-5 Base @ 37' and submitted for laboratory analysis. Laboratory results for this sample were still above NMOCD Guideline RALs with a combined TPH of 610 mg/Kg. The depth of the excavation, compounded by the proximity to culturally sensitive areas and competent bedrock rendered continuing the excavation of this location infeasible. SMA recommended application of an oxidizer, backfilling and drilling to delineate the vertical extent of the contamination. A summary of laboratory results for excavation samples is included as Table 3. A copy of the laboratory report is included in Appendix C.

On June 8, 2015, after receiving approval by the BLM, SMA oversaw the application of the chemical oxidizer potassium permanganate ($KMnO_4$) to the excavation. 300 gallons of a 5% concentration solution of $KMnO_4$ was applied to the base of the excavation. The oxidizer was applied by Envirotech Inc. The excavation was then backfilled with clean imported soil by Halo Services Inc. contractors.

Coring and Monitoring Well Installation

In order to further delineate the vertical extent of the hydrocarbon impact, and to determine if hydrocarbon contamination had come into contact with groundwater, SMA, on behalf of Enterprise, conducted a coring investigation of the Trunk K #8 pipeline release site.

Soil Coring Location: Drilling activities took place within the pipeline right-of-way (ROW), within the extent of the backfilled excavation. The borehole was located as close to the release point as possible, on the north side of the 16" pipeline.

Well Permits: Enterprise obtained permission from the OSE to core an exploratory boring, to install a temporary monitoring well if groundwater was encountered, and to construct a permanent monitoring well if preliminary groundwater results indicated hydrocarbon impact. As a permanent monitoring well was ultimately required, SMA obtained a monitoring well permit on behalf of Enterprise Products from the OSE following well completion. OSE issued the well permit on July 28, 2015.

Drilling, Sampling, and Monitoring Well Completions: On June 22, 2015, Enviro-Drill Inc. of Albuquerque, NM, mobilized to site and, utilizing a CME 75, installed a borehole within the extent of the Trunk K #8 excavation. A hollow stem auger (HSA) drilling method was used to advance through the backfill to 35 feet bgs, within 2 feet of the base of the excavation. A diamond tipped coring bit was then advanced through the stem of the HSA

and began coring sandstone from 35 feet to 48 feet bgs. A sample was collected at the intervals 35-38 feet, 40 feet, 45 feet and 48 feet bgs. Each sample was screened with a calibrated photo ionization detector (PID) and PetroFlag® diffractometer. Soil types, PID and Petroflag results are included in the well completion diagram, Figure 4. Three soil samples were collected from the core samples and submitted to Hall Environmental Analysis Laboratory (Hall) for rush analysis via EPA methods 8015 GRO/DRO and 8021 BTEX. Coring soil sample results are included in table 4. A copy of the laboratory report is included in Appendix C.

Water was encountered at approximately 40 feet bgs during coring activities. A grab sample was collected from within the HSA with a clean disposable bailer, placed in $HgCl_2$ preserved 40ml VOA sample jars, and submitted to Hall for rush analysis to determine if the monitoring well was required. The results of this sample indicated contamination above New Mexico Water Quality Control Commission (NMWQCC) groundwater standards and the borehole was completed as a monitoring well on June 24, 2015.

The soil boring was advanced to 48 feet bgs through sandstone with the coring bit during sampling. After groundwater was encountered and hydrocarbon impact detected, the borehole was completed to 48 feet bgs with the HSA tooling. Threaded 2" PVC well casing was used to construct the monitoring well with a 2.5 foot sump, 10 feet of 0.001 inch slotted well screen, and solid riser casing to about 3 feet above ground surface. A well completion diagram is included as Figure 3.

The well was completed with an aboveground steel well shroud cemented into a 2 foot round pad with a minimum thickness of 4-inches. The well was fitted with 3 protective bollards to prevent damage from vehicle collisions, livestock or wildlife.

Well Development and Sampling: On June 25 and 26, 2015, SMA returned to site to develop and sample the monitoring well in accordance with the workplan submitted to Enterprise on June 4, 2015. The monitoring well was developed by rapidly inserting a solid slug into the well and allowing the well to sit and reach equilibrium for approximately three minutes. The slug was then rapidly removed and allowed to reach equilibrium for approximately three minutes. This process was repeated 10 times. Water was subsequently purged until pH, conductivity, and temperature stabilized to within 10% of the previous readings and turbidity decreased.

On June 26, 2015 SMA purged and collected a groundwater sample from the developed monitoring well. The sample was then couriered under chain of custody procedures to Hall Environmental Analysis Laboratory in Albuquerque, NM for laboratory analysis via EPA Method 8021 for benzene, toluene, ethylbenzene and xylenes (BTEX). All purged water was collected and containerized for offsite disposal at the Envirotech Landfarm. Disposal documentation is included in Appendix B.

Hydrogeology: The soil boring was advanced through 35 feet of backfill material before encountering a moderately cemented medium grained arkosic sandstone. An unconfined shallow aquifer was intersected about 40 feet bgs. A thin lens of shale was encountered

between 44 and 44.5 feet bgs. Groundwater flow is likely to the northwest, towards Largo Wash. A westerly component of the groundwater flow direction is likely as the general direction of surface water flow within the wash is westerly. A lithologic log is included as part of the well completion diagram including soil descriptions, colors and field screening results in Figure 4.

4.0 Conclusions and Recommendations

Core Sampling Results: Laboratory analytical results of the soil samples collected from the coring and sampling were below NMOCD RALs for all contaminants of concern. Results are included in Figure 4, monitoring well completion diagram. A summary of laboratory results is included as Table 4. A copy of the laboratory report is included in Appendix C.

Groundwater Sampling Results: Laboratory analytical results of the groundwater sample GW #1, collected from within the HSA in the open borehole, were above standards with a benzene concentration of 1300 µg/L, toluene concentration of 4700 µg/L, and total xylenes concentration of 2400 µg/L. Ethylbenzene was below the NMWQCC Standards. Groundwater laboratory results are included in Table 5. A groundwater sample map is included as Figure 5. A copy of the laboratory report is included in Appendix C.

Laboratory analytical results of the groundwater sample MW-1 were above NMWQCC groundwater standards with a benzene concentration of 2400 µg/L, toluene concentration of 2400 µg/L, and total xylenes concentration of 980 µg/L. Ethylbenzene was below the NMWQCC Standards. Groundwater laboratory results are included in Table 5. A copy of the laboratory report is included in Appendix C.

SMA Recommendations: Because groundwater contaminant concentrations are above NMWQCC standards, SMA recommends the installation and sampling of three additional monitoring wells to further delineate the extent of groundwater impact at the Trunk K #8 site.

5.0 Closure and Limitations

The scope of our services consisted of the performance of a preliminary spill assessment, verification of release stabilization, regulatory liaison, oversight and control of remediation operations, disposal arrangements and documentation, project management, and preparation of this summary report. All work has been performed in accordance with generally accepted professional environmental consulting practices.

If there are any questions regarding this report, please contact either Jesse Sprague or Reid Allan at 505-325-7535.

Submitted by:

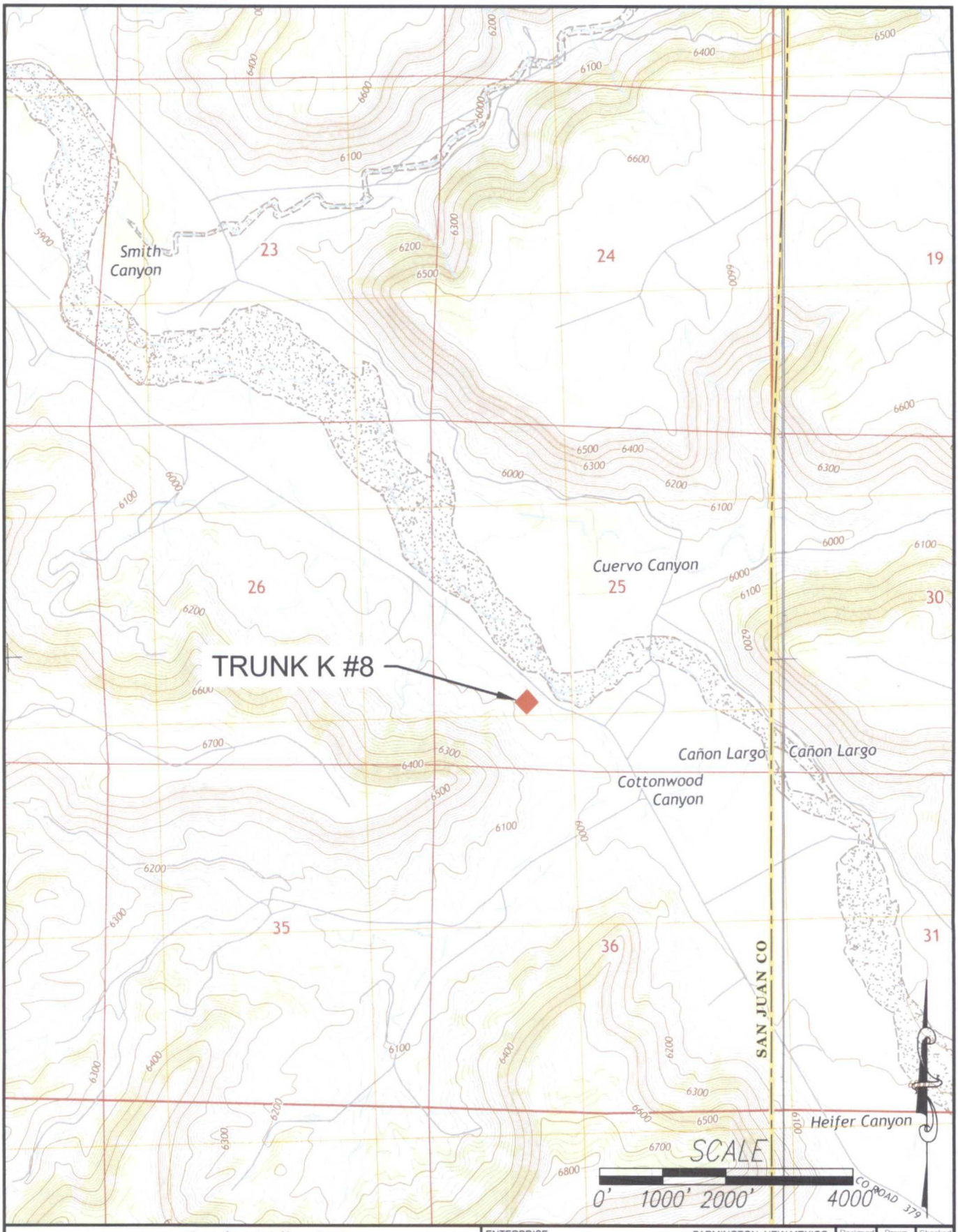
SOUDER, MILLER & ASSOCIATES

Jesse E. Sprague
Staff Scientist

Reviewed by:

Reid S. Allan, PG
Principal Scientist

Figures



SMA
Engineering
Environmental
Surveying

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ENTERPRISE FARMINGTON, NEW MEXICO

VICINITY MAP
TRUNK K #8
SECTION 25, T27N, R8W
SAN JUAN COUNTY

Designed	Drawn	Checked
JES	DJB	RSA

Date: July 2015
Scale: Horiz. 1" = 2000'
Vert. NA
Project No: 5123699
Figure 1

P:\5-Enterprise MSA (2015) 5123699\Release Response\BG10 - Trunk K\CAD\SITE MAP Trunk K-8.dwg, GJF, 7/16/2015 3:06 PM

SMA
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Environmental
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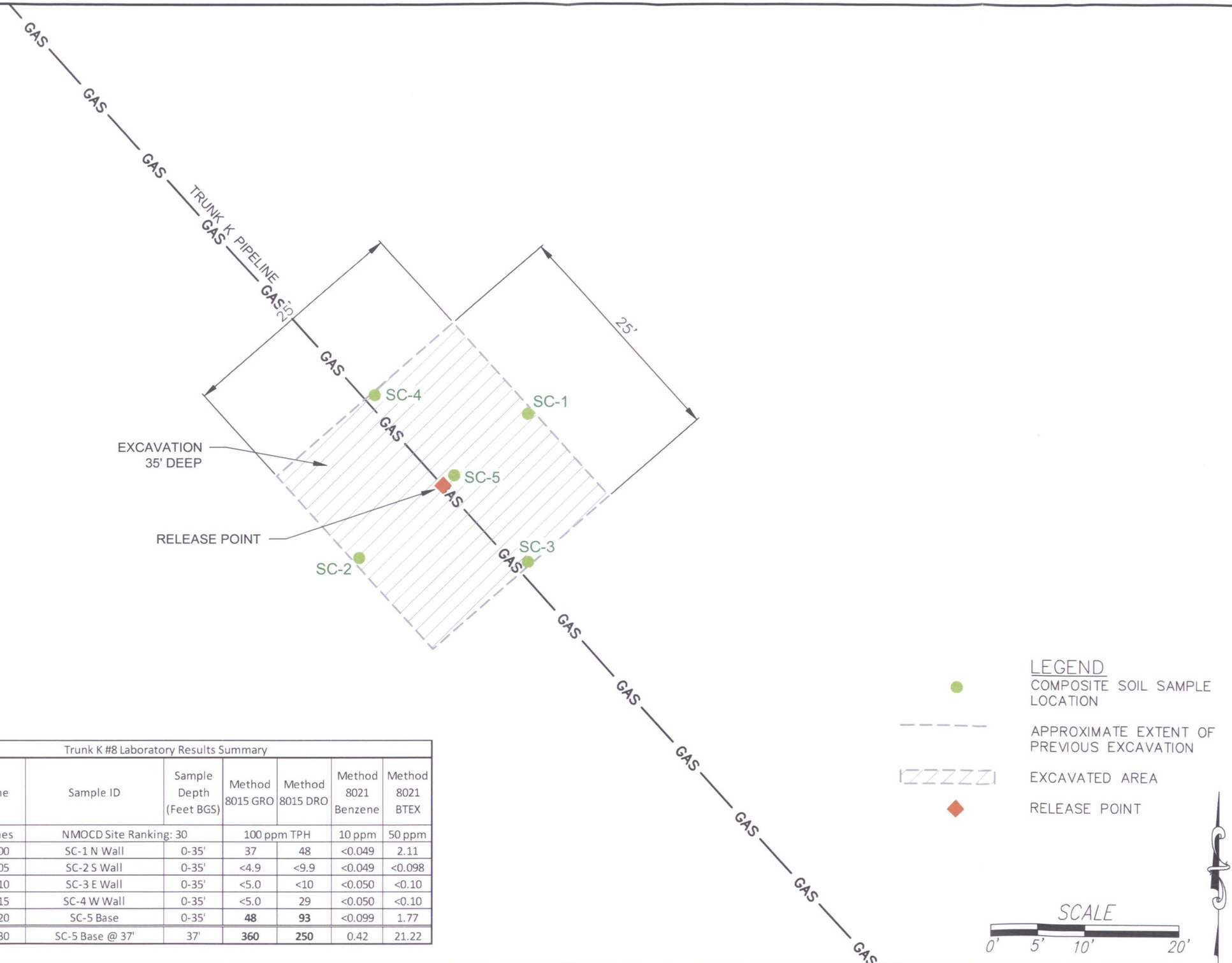
SITE LOCATION MAP
TRUNK K #8
SECTION 25, T27N, R8W
SAN JUAN COUNTY

Designed	Drawn	Checked
JES	DJB	RSA

Date: July 2015
Scale: Horiz: 1" = 30' Vert: NA
Project No: 5123699
Figure 2

P:\5-Enterprise MSA (2015) 5123699\Release Response\BG10 - Trunk K\CAD\SITE MAP Trunk K-8.dwg, GJF, 7/15/2015 9:15 AM



Trunk K #8 Laboratory Results Summary							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 30		100 ppm TPH		10 ppm	50 ppm
5/1/2015	13:00	SC-1 N Wall	0-35'	37	48	<0.049	2.11
5/1/2015	13:05	SC-2 S Wall	0-35'	<4.9	<9.9	<0.049	<0.098
5/1/2015	13:10	SC-3 E Wall	0-35'	<5.0	<10	<0.050	<0.10
5/1/2015	13:15	SC-4 W Wall	0-35'	<5.0	29	<0.050	<0.10
5/1/2015	13:20	SC-5 Base	0-35'	**48**	**93**	<0.099	1.77
5/12/2015	14:30	SC-5 Base @ 37'	37'	**360**	**250**	0.42	21.22

ENTERPRISE FARMINGTON, NEW MEXICO

SOIL CONTAMINANT CONCENTRATION
TRUNK K #8
SECTION 25, T27N, R8W

Rev #	Date	Description

Souder, Miller & Associates
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Farmington, NM 87401-5907
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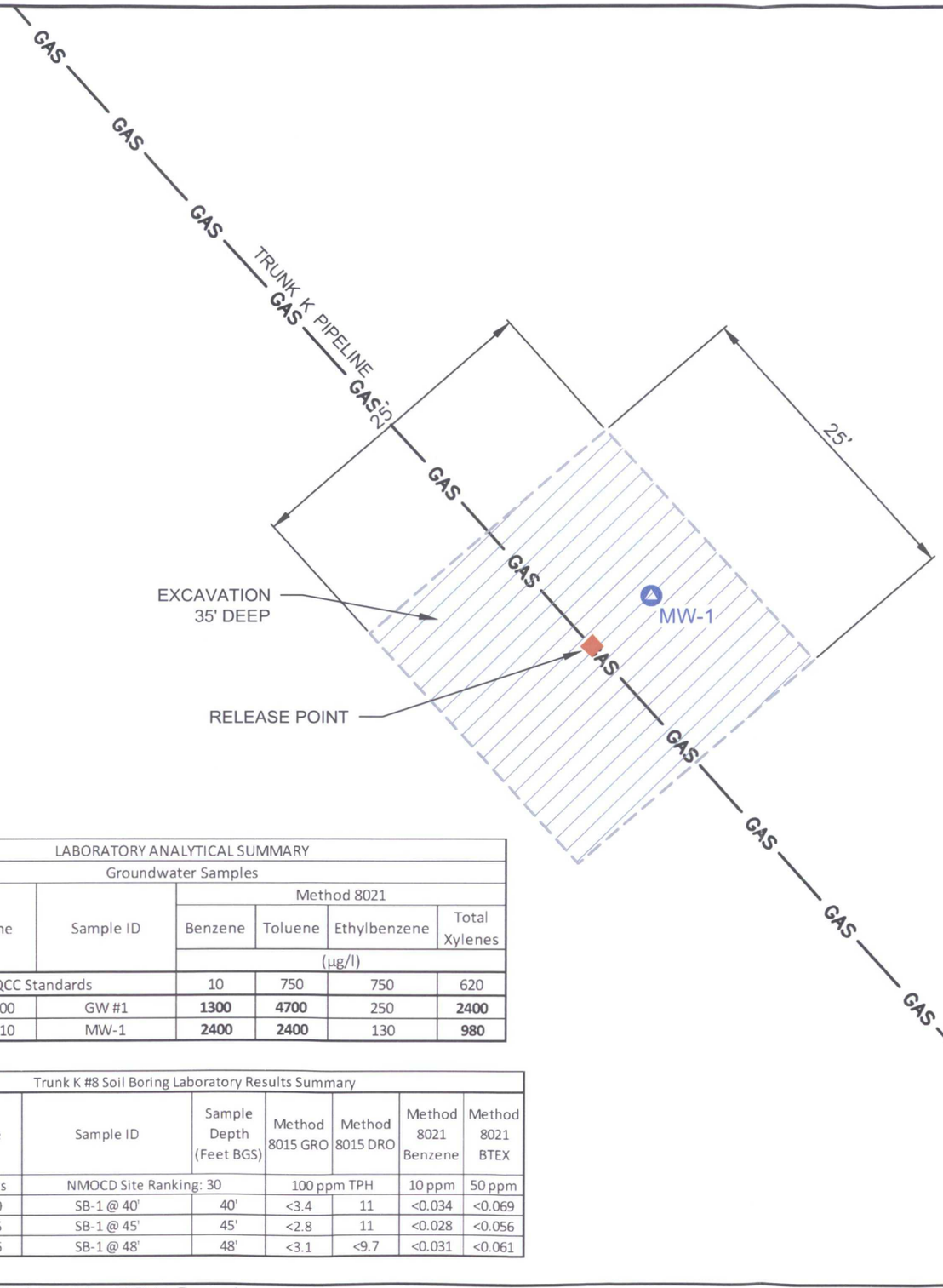
Designed	Drawn	Checked
JES	DJB	RSA

Date: July 2015
Scale: Horiz. 1" = 10' Vert. NA
Project No. 5123699
Figure 3

P:\5-Enterprise MSA (2015) 5123699\Release Response\BG10 - Trunk K\CAD\SITE MAP Trunk K-8.dwg, GJF, 7/31/2015 11:58 AM



NOTES:

1. SOIL SAMPLES COLLECTED DURING DRILLING ACTIVITIES ARE LABELED AS SB–1 THROUGH SB–3.
2. GROUND WATER GRAB SAMPLE GW–1 WAS COLLECTED FROM THE BOREHOLE PRIOR TO MONITORING WELL CONSTRUCTION.
3. GROUNDWATER SAMPLE MW–1 WAS COLLECTED AFTER COMPLETION AND DEVELOPMENT OF THE MONITORING WELL.

LEGEND

- MONITORING WELL LOCATION
- APPROXIMATE EXTENT OF PREVIOUS EXCAVATION
- EXCAVATED AREA
- RELEASE POINT

SCALE

0' 5' 10' 20'

LABORATORY ANALYTICAL SUMMARY

Groundwater Samples

Date	Time	Sample ID	Method 8021 Benzene	Toluene	Ethylbenzene	Total Xylenes
			(µg/l)			
NMWQCC Standards			10	750	750	620
6/22/2015	16:00	GW #1	**1300**	**4700**	250	**2400**
6/26/2015	11:10	MW-1	**2400**	**2400**	130	**980**

Trunk K #8 Soil Boring Laboratory Results Summary

Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 30		100 ppm TPH		10 ppm	50 ppm
6/22/2015	14:40	SB-1 @ 40'	40'	<3.4	11	<0.034	<0.069
6/22/2015	15:15	SB-1 @ 45'	45'	<2.8	11	<0.028	<0.056
6/22/2015	15:16	SB-1 @ 48'	48'	<3.1	<9.7	<0.031	<0.061

Rev #	Date	Description

ENTERPRISE — FARMINGTON, NEW MEXICO

SOIL CONTAMINANT CONCENTRATION
TRUNK K #8
SECTION 25, T27N, R8W

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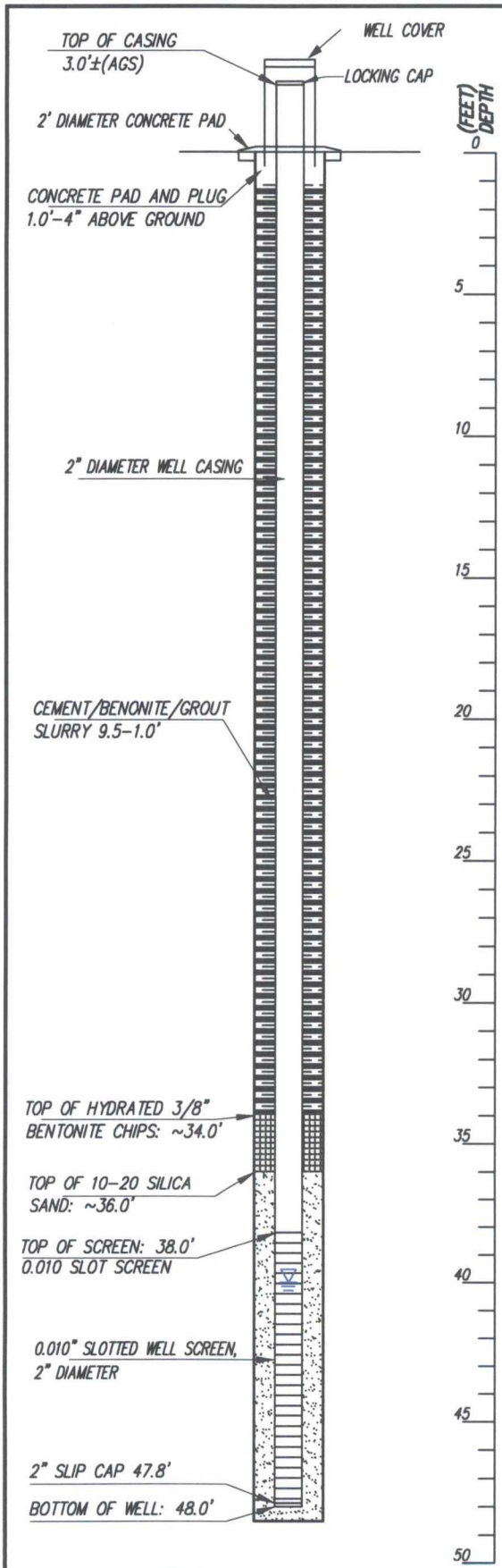
SMA Engineering Environmental Surveying

Designed	Drawn	Checked
JES	DJB	RSA

Date: July 2015
Scale: Horiz: 1" = 10' Vert: NA
Project No: 5123699
Figure 5

P:\5-Enterprise MSA (2015) 5123699\Release Response\BG10 - Trunk K\CAD\SITE MAP Trunk K-8.dwg, GJF, 7/31/2015 11:56 AM

MONITORING WELL CONSTRUCTION LOG



SOIL TYPE	PID (PPM)	PETROFLAG (mg/kg)	COLOR	SAMPLE DESCRIPTION
				BACKFILL
	196	350	10YR 4/4	MODERATELY CONSOLIDATED QUARTZ RICH MEDIUM GRAINED ARKOSIC SANDSTONE
	NOT SCREENED		10YR 4/4	MODERATELY CONSOLIDATED QUARTZ RICH MEDIUM GRAINED ARKOSIC SANDSTONE
	88.4	74	10YR 4/4	MODERATELY CONSOLIDATED QUARTZ RICH MEDIUM GRAINED ARKOSIC SANDSTONE
	NOT SCREENED		10YR 5/1	WELL CONSOLIDATED QUARTZ RICH FINE TO MEDIUM GRAINED ARKOSIC SANDSTONE, GRAY FINES IN MATRIX
			5Y 4/1	GRAY, FINE GRAINED FISSILE SHALE
	2.1	82	5YR 4/2	WELL CONSOLIDATED QUARTZ RICH FINE TO MEDIUM GRAINED ARKOSIC SANDSTONE, GRAY FINES IN MATRIX
	2.8	49	2.5Y 4/3	MODERATELY CONSOLIDATED QUARTZ RICH FINE TO COARSE GRAINED ARKOSIC SANDSTONE

END OF HOLE

LOG LEGEND

- BACKFILL
- SANDSTONE
- SHALE
- STATIC WATER LEVEL

STATIC WATER LEVEL
MEASURED AT ~40.0' BGS

DRILLER: ENVIRO–DRILL, INC.
DATE COMPLETED: JUNE 24, 2015
BOREHOLE DIAMETER: 6" O.D.
SAMPLER TYPE: CORE BIT
DRILLING METHOD: HOLLOW STEM AUGER
TOTAL BORING DEPTH: 49 FT.
LOGGED BY: JES
NS = NOT SAMPLED

SMA Engineering Environmental Surveying
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ENTERPRISE — FARMINGTON, NEW MEXICO

MW-1 CONSTRUCTION LOG
TRUNK K #8
SECTION 25, T27N, R8W
SAN JUAN COUNTY

Designed	Drawn	Checked
JES	DJB	RSA

Date: July 2015
Scale: Horiz: NA Vert: NA
Project No: 5123699
Figure 4

P:\5-Enterprise MSA (2015) 5123699\Release Response\BG10 - Trunk K\CAD\Soil Boring Log.dwg, GJF, 7/31/2015 11:49 AM

Tables

Site Ranking Information: Trunk K #8 Pipeline Release Site			
Depth to Groundwater	**NMOCD Numeric Rank for this Site**	**Source for Ranking**	**Notes**
< 50 BGS = 20	20	Field verification that groundwater is about 40' bgs	Groundwater encountered during drilling activities
50' to 99' = 10			
>100' = 0			
Ranking Criteria for Horizontal Distance to Nearest Surface Water	**NMOCD Numeric Rank for this Site**	**Source for Ranking**	**Notes**
< 200' = 20		Field verification that release is located 625 feet west of Largo Canyon Wash	Release is located between 200' -1,000' from Largo Canyon Wash
200'-1000' = 10	10		
>1000'			
Ranking Criteria for Horizontal Distance to a Water Well or Water Source	**NMOCD Numeric Rank for this Site**	**Source for Ranking**	**Notes**
<1000' from a water source? <200' for a private domestic water source? YES OR NO to BOTH. YES = 20, NO = 0	0	NM State Engineer Water Well Database	No recorded water wells located within 1,000 feet and 1 located within a 1 mile radius
Total Site Ranking	**30**		
Soil Remedation Standards	0 to 9	10 to 19	**>19**
Benzene	10 PPM	10 PPM	**10 PPM**
BTEX	50 PPM	50 PPM	**50 PPM**
TPH	5000 PPM	1000 PPM	**100 PPM**

Trunk K #8 Laboratory Results Summary							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 30		100 ppm TPH		10 ppm	50 ppm
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5/1/2015	13:10	SC-3 E Wall	0-35'	<5.0	<10	<0.050	<0.10
5/1/2015	13:15	SC-4 W Wall	0-35'	<5.0	29	<0.050	<0.10
5/1/2015	13:20	SC-5 Base	0-35'	**48**	**93**	<0.099	1.77
5/12/2015	14:30	SC-5 Base @ 37'	37'	**360**	**250**	0.42	21.22

Trunk K #8 Soil Boring Laboratory Results Summary							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 30		100 ppm TPH		10 ppm	50 ppm
6/22/2015	14:40	SB-1 @ 40'	40'	<3.4	11	<0.034	<0.069
6/22/2015	15:15	SB-1 @ 45'	45'	<2.8	11	<0.028	<0.056
6/22/2015	15:16	SB-1 @ 48'	48'	<3.1	<9.7	<0.031	<0.061

LABORATORY ANALYTICAL SUMMARY						
Groundwater Samples						
Date	Time	Sample ID	Method 8021			
			Benzene	Toluene	Ethylbenzene	Total Xylenes
			(µg/l)			
NMWQCC Standards			10	750	750	620
6/22/2015	16:00	GW #1	**1300**	**4700**	250	**2400**
6/26/2015	11:10	MW-1	**2400**	**2400**	130	**980**

Appendix A
Photographic Documentation

Site Photographs
Enterprise Products Trunk K #8 Pipeline Release

Photo 1: Trunk K #8, excavation located in a small tributary wash to Largo Wash.

Photo 2: Trunk K #8 excavation encountered competent sandstone at a shallow depth, the sandstone unit extended to below the total depth of the excavation.

Site Photographs
Enterprise Products Trunk K #8 Pipeline Release

Photo 3: Trunk K #8 Final depth measured 37' BGS. Photo shows deepest bench on NE side of excavation.

Photo 4: Trunk K #8 at total depth (37' BGS), samples collected as composites from multiple bucket scrapes against sandstone bedrock. Very competent sandstone visible to depth.

Site Photographs
Enterprise Products Trunk K #8 Pipeline Release

Photo 5: Potassium Permanganate application at the Trunk K #8 excavation.

Photo 6: Trunk K #8 excavation after potassium permanganate application.

Site Photographs
Enterprise Products Trunk K #8 Pipeline Release

Photo 7: Soil coring drilling method collecting soil samples at the Trunk K #8 release location after potassium permanganate application and backfill.

Photo 8: Soil core sample collected from the Trunk K #8 borehole., 43 – 48 feet bgs.

Site Photographs
Enterprise Products Trunk K #8 Pipeline Release

Photo 9: Installation of above ground protective well cover for MW-1.

Photo 10: Installation of protective bollards around MW-1.

Appendix B
Soil Disposal Documentation

97057-0697

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-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 March 2015

2. Originating Site: Trunk K Release Sites

3. Location of Material (Street Address, City, State or ULSTR):
Unit Letter B and H of Section 26 and Unit Letter N of Section 25 Township 27 North Range 8 West: GPS 36.549537, -107.649872, 36.544737, -107.644162, 36.539889, -107.636994, 36.538368, -107.636994 and 36.538072, -107.636657; Rio Arriba, NM

4. Source and Description of Waste:
Source: Natural Gas Pipeline Release
Description: Hydrocarbon impacted soils associated with excavation activities for a natural gas pipeline release..
Estimated Volume 200 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 516 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long, representative or authorized agent for Enterprise Field Services, LLC do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☒ ***Per Load***

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long 3-26-15, representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, Kendra Rusing, representative for Envirotech, Inc do hereby certify that
Representative/Agent Signature
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Crossfire

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011**
Address of Facility: **Hilltop, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Rusing TITLE: Waste Coordinator DATE: 3-26-15
SIGNATURE: Kendra Rusing TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

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-138
Revised 08 01 11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site: Trunk K Release Sites

3. Location of Material (Street Address, City, State or ULSTR):
Unit Letter B and H of Section 26 and Unit Letter N of Section 25 Township 27 North Range 8 West: GPS 36.549537, -107.649872, 36.544737, -107.644162, 36.539889, -107.636994, 36.538368, -107.636994 and 36.538072, -107.636657; Rio Arriba, NM

4. Source and Description of Waste:
Source: Natural Gas Pipeline Release
Description: Hydrocarbon impacted soils associated with excavation activities for a natural gas pipeline release..
Estimated Volume 200 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 1212 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long, representative or authorized agent for Enterprise Field Services, LLC do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☒ ***Per Load***

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long 5-1-15, representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, Kendra Rumsey representative for Envirotech, Inc do hereby certify that
Representative/Agent Signature
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Crossfire Rosenbaum, Kyvek, Bailey's Welding

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011**
Address of Facility: **Hilltop, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Rumsey TITLE: Waste Coordinator DATE: 4/3/15
SIGNATURE: Kendra Rumsey TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
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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

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Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site: Trunk K Release Sites May 2015

3. Location of Material (Street Address, City, State or ULSTR):
Unit Letter B and H of Section 26 and Unit Letter N of Section 25 Township 27 North Range 8 West: GPS 36.549537, -107.649872, 36.544737, -107.644162, 36.539889, -107.636994, 36.538368, -107.636994 and 36.538072, -107.636657; Rio Arriba, NM

4. Source and Description of Waste:
Source: Natural Gas Pipeline Release
Description: Hydrocarbon impacted soils associated with excavation activities for a natural gas pipeline release..
Estimated Volume 200 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 304 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long, representative or authorized agent for Enterprise Field Services, LLC do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☒ ***Per Load***

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long 5-1-15, representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, Kendra Rumsey, representative for Envirotech, Inc do hereby certify that
Representative/Agent Signature
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Crossfire, Baileys Rosenbaum

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011**
Address of Facility: **Hilltop, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Rumsey TITLE: Waste Coordinator DATE: 5-1-15
SIGNATURE: Kendra Rumsey TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

97057-0697

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
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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-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site: Trunk K Release Sites June 2015

3. Location of Material (Street Address, City, State or ULSTR):
Unit Letter B and H of Section 26 and Unit Letter N of Section 25 Township 27 North Range 8 West: GPS 36.549537, -107.649872, 36.544737, -107.644162, 36.539889, -107.636994, 36.538368, -107.636994 and 36.538072, -107.636657; Rio Arriba, NM

4. Source and Description of Waste:
Source: Natural Gas Pipeline Release
Description: Hydrocarbon impacted soils associated with excavation activities for a natural gas pipeline release.
Estimated Volume 200 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 72 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Russell Leab, representative or authorized agent for Enterprise Field Services, LLC do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☒ ***Monthly*** ☐ ***Weekly*** ☒ ***Per Load***

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Russell Leab 6-15-2015, representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, Kenda Ruming, representative for Envirotech, Inc do hereby certify that
Representative/Agent Signature
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: ~~Crossfire~~ Envirotech, JP Trucking, HBC, Colonial Bros, Kelley, Cal Tom Co

OCD Permitted Surface Waste Management Facility Rich

Name and Facility Permit #: **Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011**
Address of Facility: **Hilltop, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Kenda Ruming TITLE: Waste Coordinator DATE: 6-15-15
SIGNATURE: Kenda Ruming TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

Appendix C
Laboratory Analytical Report

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 07, 2015

Steve Moskal

Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Trunk K 2015 OrderNo.: 1505061

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/2/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1505061**
Date Reported: **5/7/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K 2015
Lab ID: 1505061-001 **Matrix:** SOIL

Client Sample ID: #8 SC-1 N
Collection Date: 5/1/2015 1:00:00 PM
Received Date: 5/2/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	48	9.9		mg/Kg	1	5/5/2015 5:41:14 PM	19001
Surr: DNOP	127	57.9-140		%REC	1	5/5/2015 5:41:14 PM	19001
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	37	4.9		mg/Kg	1	5/6/2015 11:14:46 PM	19020
Surr: BFB	266	80-120	S	%REC	1	5/6/2015 11:14:46 PM	19020
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	5/6/2015 11:14:46 PM	19020
Toluene	0.24	0.049		mg/Kg	1	5/6/2015 11:14:46 PM	19020
Ethylbenzene	0.17	0.049		mg/Kg	1	5/6/2015 11:14:46 PM	19020
Xylenes, Total	1.7	0.099		mg/Kg	1	5/6/2015 11:14:46 PM	19020
Surr: 4-Bromofluorobenzene	124	80-120	S	%REC	1	5/6/2015 11:14:46 PM	19020

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K 2015
Lab ID: 1505061-002 **Matrix:** SOIL

Client Sample ID: #8 SC-2 S
Collection Date: 5/1/2015 1:05:00 PM
Received Date: 5/2/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/5/2015 6:02:36 PM	19001
Surr: DNOP	115	57.9-140		%REC	1	5/5/2015 6:02:36 PM	19001
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/6/2015 11:43:26 PM	19020
Surr: BFB	95.9	80-120		%REC	1	5/6/2015 11:43:26 PM	19020
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	5/6/2015 11:43:26 PM	19020
Toluene	ND	0.049		mg/Kg	1	5/6/2015 11:43:26 PM	19020
Ethylbenzene	ND	0.049		mg/Kg	1	5/6/2015 11:43:26 PM	19020
Xylenes, Total	ND	0.098		mg/Kg	1	5/6/2015 11:43:26 PM	19020
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	5/6/2015 11:43:26 PM	19020

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K 2015
Lab ID: 1505061-003 **Matrix:** SOIL

Client Sample ID: #8 SC-3 E
Collection Date: 5/1/2015 1:10:00 PM
Received Date: 5/2/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/5/2015 6:23:50 PM	19001
Surr: DNOP	132	57.9-140		%REC	1	5/5/2015 6:23:50 PM	19001
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/7/2015 12:12:04 AM	19020
Surr: BFB	90.6	80-120		%REC	1	5/7/2015 12:12:04 AM	19020
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	5/7/2015 12:12:04 AM	19020
Toluene	ND	0.050		mg/Kg	1	5/7/2015 12:12:04 AM	19020
Ethylbenzene	ND	0.050		mg/Kg	1	5/7/2015 12:12:04 AM	19020
Xylenes, Total	ND	0.10		mg/Kg	1	5/7/2015 12:12:04 AM	19020
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	5/7/2015 12:12:04 AM	19020

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K 2015
Lab ID: 1505061-004 **Matrix:** SOIL

Client Sample ID: #8 SC-4 W
Collection Date: 5/1/2015 1:15:00 PM
Received Date: 5/2/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	29	10		mg/Kg	1	5/5/2015 6:45:12 PM	19001
Surr: DNOP	127	57.9-140		%REC	1	5/5/2015 6:45:12 PM	19001
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/7/2015 12:40:48 AM	19020
Surr: BFB	119	80-120		%REC	1	5/7/2015 12:40:48 AM	19020
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	5/7/2015 12:40:48 AM	19020
Toluene	ND	0.050		mg/Kg	1	5/7/2015 12:40:48 AM	19020
Ethylbenzene	ND	0.050		mg/Kg	1	5/7/2015 12:40:48 AM	19020
Xylenes, Total	ND	0.10		mg/Kg	1	5/7/2015 12:40:48 AM	19020
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	5/7/2015 12:40:48 AM	19020

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K 2015
Lab ID: 1505061-005 **Matrix:** SOIL

Client Sample ID: #8 SC-5 Base
Collection Date: 5/1/2015 1:20:00 PM
Received Date: 5/2/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	93	9.7		mg/Kg	1	5/5/2015 7:06:31 PM	19001
Surr: DNOP	134	57.9-140		%REC	1	5/5/2015 7:06:31 PM	19001
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	48	9.9		mg/Kg	2	5/7/2015 1:09:25 AM	19020
Surr: BFB	206	80-120	S	%REC	2	5/7/2015 1:09:25 AM	19020
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.099		mg/Kg	2	5/7/2015 1:09:25 AM	19020
Toluene	ND	0.099		mg/Kg	2	5/7/2015 1:09:25 AM	19020
Ethylbenzene	0.17	0.099		mg/Kg	2	5/7/2015 1:09:25 AM	19020
Xylenes, Total	1.6	0.20		mg/Kg	2	5/7/2015 1:09:25 AM	19020
Surr: 4-Bromofluorobenzene	118	80-120		%REC	2	5/7/2015 1:09:25 AM	19020

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1505061**

07-May-15

Client: Souder, Miller and Associates

Project: Trunk K 2015

Sample ID **MB-19001**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **19001**	RunNo: **25956**
Prep Date: **5/1/2015**	Analysis Date: **5/5/2015**	SeqNo: **769479** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	12		10.00		116	57.9	140			

Sample ID **LCS-19001**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **19001**	RunNo: **25956**
Prep Date: **5/1/2015**	Analysis Date: **5/5/2015**	SeqNo: **769591** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	50.00	0	114	67.8	130			
Surr: DNOP	6.3		5.000		127	57.9	140			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1505061**

07-May-15

Client: Souder, Miller and Associates
Project: Trunk K 2015

Sample ID **MB-19020**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **19020**	RunNo: **25957**
Prep Date: **5/4/2015**	Analysis Date: **5/5/2015**	SeqNo: **769854** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.1	80	120			

Sample ID **LCS-19020**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **19020**	RunNo: **25957**
Prep Date: **5/4/2015**	Analysis Date: **5/5/2015**	SeqNo: **769855** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	64	130			
Surr: BFB	1000		1000		101	80	120			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R25957**	RunNo: **25957**
Prep Date:	Analysis Date: **5/5/2015**	SeqNo: **769884** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		91.8	80	120			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R25957**	RunNo: **25957**
Prep Date:	Analysis Date: **5/5/2015**	SeqNo: **769885** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.9	80	120			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R25998**	RunNo: **25998**
Prep Date:	Analysis Date: **5/6/2015**	SeqNo: **771159** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		89.6	80	120			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R25998**	RunNo: **25998**
Prep Date:	Analysis Date: **5/6/2015**	SeqNo: **771160** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.8	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1505061**

07-May-15

Client: Souder, Miller and Associates

Project: Trunk K 2015

Sample ID **MB-19020**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **19020**	RunNo: **25957**
Prep Date: **5/4/2015**	Analysis Date: **5/5/2015**	SeqNo: **769908** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID **LCS-19020**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **19020**	RunNo: **25957**
Prep Date: **5/4/2015**	Analysis Date: **5/5/2015**	SeqNo: **769909** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	108	76.6	128			
Toluene	1.1	0.050	1.000	0	107	75	124			
Ethylbenzene	1.1	0.050	1.000	0	109	79.5	126			
Xylenes, Total	3.2	0.10	3.000	0	107	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R25998**	RunNo: **25998**
Prep Date:	Analysis Date: **5/6/2015**	SeqNo: **771207** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R25998**	RunNo: **25998**
Prep Date:	Analysis Date: **5/6/2015**	SeqNo: **771210** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **SMA-FARM** Work Order Number: **1505061** RcptNo: **1**

Received by/date: 05/02/15

Logged By: **Lindsay Mangin** 5/2/2015 8:30:00 AM

Completed By: **Lindsay Mangin** 5/2/2015 10:21:30 AM

Reviewed By: AT 05/04/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good	Yes			

Chain-of-Custody Record

Client: Souder Miller & Associates

Mailing Address: 401 W Broadway
Farmington, NM

Phone #: 505 392 0594

email or Fax#: Steven.Moskal@soudermiller.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☑ Rush 72 hr

Project Name: Tank K 2015

Project #: N20589

Project Manager: Steve Moskal

Sampler: J. Sprague

On Ice: ☑ Yes ☐ No

Sample Temperature: 3.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1505061	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
5-1-15	1300	Soil	#8 SC-1 N	1 4oz	—	-001	X		X													
	1305		#8 SC-2 S			-002	X		X													
	1310		#8 SC-3 E			-003	X		X													
	1315		#8 SC-4 W			-004	X		X													
	1320		#8 SC-5 Base			-005	X		X													
						-006																

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
5/1/15	1835		Kristen Walker	5/1/15	1835	Invoice Enterprise
5/1/15	1944	Kristen Walker		05/02/15	0830	Please copy Jesse.Sprague@soudermiller.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 14, 2015

Steve Moskal

Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Trunk K OrderNo.: 1505542

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/13/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K
Lab ID: 1505542-001

Client Sample ID: SC-5 Base @ 37'
Collection Date: 5/12/2015 2:30:00 PM
Matrix: MEOH (SOIL) **Received Date:** 5/13/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	250	9.7		mg/Kg	1	5/13/2015 12:52:24 PM	19199
Surr: DNOP	107	57.9-140		%REC	1	5/13/2015 12:52:24 PM	19199
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	360	66		mg/Kg	20	5/13/2015 9:40:02 AM	R26157
Surr: BFB	146	80-120	S	%REC	20	5/13/2015 9:40:02 AM	R26157
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.42	0.33		mg/Kg	20	5/13/2015 9:40:02 AM	R26157
Toluene	6.4	0.66		mg/Kg	20	5/13/2015 9:40:02 AM	R26157
Ethylbenzene	1.4	0.66		mg/Kg	20	5/13/2015 9:40:02 AM	R26157
Xylenes, Total	13	1.3		mg/Kg	20	5/13/2015 9:40:02 AM	R26157
Surr: 4-Bromofluorobenzene	121	80-120	S	%REC	20	5/13/2015 9:40:02 AM	R26157

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1505542**

14-May-15

Client: Souder, Miller and Associates
Project: Trunk K

Sample ID **1505542-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-5 Base @ 37'**	Batch ID: **19199**	RunNo: **26152**
Prep Date: **5/13/2015**	Analysis Date: **5/13/2015**	SeqNo: **776062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	280	9.7	48.26	251.4	59.1	42.3	146			
Surr: DNOP	4.8		4.826		99.5	57.9	140			

Sample ID **1505542-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-5 Base @ 37'**	Batch ID: **19199**	RunNo: **26152**
Prep Date: **5/13/2015**	Analysis Date: **5/13/2015**	SeqNo: **776613** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	230	9.6	48.12	251.4	-51.9	42.3	146	21.1	28.9	S
Surr: DNOP	5.6		4.812		115	57.9	140	0	0	

Sample ID **MB-19199**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **19199**	RunNo: **26152**
Prep Date: **5/13/2015**	Analysis Date: **5/13/2015**	SeqNo: **776614** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		107	57.9	140			

Sample ID **LCS-19199**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **19199**	RunNo: **26152**
Prep Date: **5/13/2015**	Analysis Date: **5/13/2015**	SeqNo: **776615** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.4	67.8	130			
Surr: DNOP	5.1		5.000		101	57.9	140			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1505542**

14-May-15

Client: Souder, Miller and Associates
Project: Trunk K

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R26157**	RunNo: **26157**
Prep Date:	Analysis Date: **5/13/2015**	SeqNo: **776429** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		95.5	80	120			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R26157**	RunNo: **26157**
Prep Date:	Analysis Date: **5/13/2015**	SeqNo: **776430** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.5	64	130			
Surr: BFB	1000		1000		100	80	120			

Sample ID **1505542-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-5 Base @ 37'**	Batch ID: **R26157**	RunNo: **26157**
Prep Date:	Analysis Date: **5/13/2015**	SeqNo: **776431** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	700	66	328.1	364.6	101	47.9	144			
Surr: BFB	21000		13120		163	80	120			S

Sample ID **1505542-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-5 Base @ 37'**	Batch ID: **R26157**	RunNo: **26157**
Prep Date:	Analysis Date: **5/13/2015**	SeqNo: **776432** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	720	66	328.1	364.6	107	47.9	144	2.62	29.9	
Surr: BFB	21000		13120		164	80	120	0	0	S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1505542**

14-May-15

Client: Souder, Miller and Associates

Project: Trunk K

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R26157**	RunNo: **26157**
Prep Date:	Analysis Date: **5/13/2015**	SeqNo: **776458** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R26157**	RunNo: **26157**
Prep Date:	Analysis Date: **5/13/2015**	SeqNo: **776459** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	76.6	128			
Toluene	1.0	0.050	1.000	0	101	75	124			
Ethylbenzene	1.0	0.050	1.000	0	103	79.5	126			
Xylenes, Total	3.1	0.10	3.000	0	102	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Sample ID **1505542-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-2 S Wall @ 0-12'**	Batch ID: **R26157**	RunNo: **26157**
Prep Date:	Analysis Date: **5/13/2015**	SeqNo: **776460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.035	0.6940	0	103	69.2	126			
Toluene	0.71	0.035	0.6940	0.007558	102	65.6	128			
Ethylbenzene	0.73	0.035	0.6940	0	105	65.5	138			
Xylenes, Total	2.2	0.069	2.082	0	104	63	139			
Surr: 4-Bromofluorobenzene	0.76		0.6940		110	80	120			

Sample ID **1505542-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-2 S Wall @ 0-12'**	Batch ID: **R26157**	RunNo: **26157**
Prep Date:	Analysis Date: **5/13/2015**	SeqNo: **776461** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.73	0.035	0.6940	0	105	69.2	126	1.43	18.5	
Toluene	0.74	0.035	0.6940	0.007558	105	65.6	128	3.13	20.6	
Ethylbenzene	0.76	0.035	0.6940	0	110	65.5	138	4.14	20.1	
Xylenes, Total	2.2	0.069	2.082	0	107	63	139	2.10	21.1	
Surr: 4-Bromofluorobenzene	0.75		0.6940		109	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **SMA-FARM** Work Order Number: **1505542** RcptNo: **1**

Received by/date: 05/13/15

Logged By: **Lindsay Mangin** **5/13/2015 7:00:00 AM**

Completed By: **Lindsay Mangin** **5/13/2015 7:26:25 AM**

Reviewed By: 05/13/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway
Farmington, NM, 87401

Phone #: 505 325 7535

email or Fax#: steven.moskal@soudermiller.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other ______

☐ EDD (Type) ______

Turn-Around Time:
☐ Standard ☑ Rush Same Day

Project Name: Trunk K

Project #: N20589

Project Manager: Steven Moskal

Sampler: J. Sprague

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1505542	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / ~~MRO~~)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
-12	1430	Soil	SC-5 Base @ 37'	1 4oz MeOH kit	MeOH	-001	X		X													
5-12	1530	Soil	SC-2 S wall @ 0-12'	1 4oz MeOH kit	MeOH	-002	X		X													

Date	Time	Relinquished by:	Received by:	Date	Time
5/12/15	1754	Jesse E Sprague	Christine Walters	5/12/15	1754
5/12/15	1837	Christine Walters	[signature]	05/13/15	0700

Remarks: Invoice EPCO
Please copy
Jesse.Sprague@soudermiller.com

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 24, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Trunk K #8 OrderNo.: 1506A21

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/23/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1506A21**
Date Reported: **6/24/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K #8
Lab ID: 1506A21-001
Client Sample ID: SB-1 @ 40'
Collection Date: 6/22/2015 2:40:00 PM
Matrix: MEOH (SOIL)
Received Date: 6/23/2015 6:58:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	6/23/2015 9:44:09 AM	19870
Surr: DNOP	96.5	57.9-140		%REC	1	6/23/2015 9:44:09 AM	19870
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	6/23/2015 9:19:36 AM	19852
Surr: BFB	84.0	75.4-113		%REC	1	6/23/2015 9:19:36 AM	19852
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.034		mg/Kg	1	6/23/2015 9:19:36 AM	19852
Toluene	ND	0.034		mg/Kg	1	6/23/2015 9:19:36 AM	19852
Ethylbenzene	ND	0.034		mg/Kg	1	6/23/2015 9:19:36 AM	19852
Xylenes, Total	ND	0.069		mg/Kg	1	6/23/2015 9:19:36 AM	19852
Surr: 4-Bromofluorobenzene	85.4	80-120		%REC	1	6/23/2015 9:19:36 AM	19852

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K #8
Lab ID: 1506A21-002
Matrix: MEOH (SOIL)
Client Sample ID: SB-1 @ 45'
Collection Date: 6/22/2015 3:15:00 PM
Received Date: 6/23/2015 6:58:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	11	10		mg/Kg	1	6/23/2015 11:06:57 AM	19870
Surr: DNOP	88.8	57.9-140		%REC	1	6/23/2015 11:06:57 AM	19870
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	2.8		mg/Kg	1	6/23/2015 9:48:25 AM	19852
Surr: BFB	84.9	75.4-113		%REC	1	6/23/2015 9:48:25 AM	19852
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.028		mg/Kg	1	6/23/2015 9:48:25 AM	19852
Toluene	ND	0.028		mg/Kg	1	6/23/2015 9:48:25 AM	19852
Ethylbenzene	ND	0.028		mg/Kg	1	6/23/2015 9:48:25 AM	19852
Xylenes, Total	ND	0.056		mg/Kg	1	6/23/2015 9:48:25 AM	19852
Surr: 4-Bromofluorobenzene	86.8	80-120		%REC	1	6/23/2015 9:48:25 AM	19852

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K #8
Lab ID: 1506A21-003
Client Sample ID: SB-1 @ 48'
Collection Date: 6/22/2015 3:16:00 PM
Matrix: MEOH (SOIL)
Received Date: 6/23/2015 6:58:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/23/2015 11:33:49 AM	19870
Surr: DNOP	94.5	57.9-140		%REC	1	6/23/2015 11:33:49 AM	19870
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	6/23/2015 10:17:08 AM	19852
Surr: BFB	84.6	75.4-113		%REC	1	6/23/2015 10:17:08 AM	19852
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.031		mg/Kg	1	6/23/2015 10:17:08 AM	19852
Toluene	ND	0.031		mg/Kg	1	6/23/2015 10:17:08 AM	19852
Ethylbenzene	ND	0.031		mg/Kg	1	6/23/2015 10:17:08 AM	19852
Xylenes, Total	ND	0.061		mg/Kg	1	6/23/2015 10:17:08 AM	19852
Surr: 4-Bromofluorobenzene	86.4	80-120		%REC	1	6/23/2015 10:17:08 AM	19852

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1506A21**

24-Jun-15

Client: Souder, Miller and Associates

Project: Trunk K #8

Sample ID **MB-19870**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **19870**	RunNo: **27012**
Prep Date: **6/23/2015**	Analysis Date: **6/23/2015**	SeqNo: **807070** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.3		10.00		92.9	57.9	140			

Sample ID **LCS-19870**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **19870**	RunNo: **27012**
Prep Date: **6/23/2015**	Analysis Date: **6/23/2015**	SeqNo: **807071** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.3	57.4	139			
Surr: DNOP	5.1		5.000		102	57.9	140			

Sample ID **1506A21-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SB-1 @ 40'**	Batch ID: **19870**	RunNo: **27012**
Prep Date: **6/23/2015**	Analysis Date: **6/23/2015**	SeqNo: **807084** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.7	48.40	10.70	70.6	42.3	146			
Surr: DNOP	4.9		4.840		101	57.9	140			

Sample ID **1506A21-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SB-1 @ 40'**	Batch ID: **19870**	RunNo: **27012**
Prep Date: **6/23/2015**	Analysis Date: **6/23/2015**	SeqNo: **807112** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.8	48.78	10.70	79.4	42.3	146	9.68	28.9	
Surr: DNOP	5.1		4.878		104	57.9	140	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1506A21**

24-Jun-15

Client: Souder, Miller and Associates

Project: Trunk K #8

Sample ID **MB-19852**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **19852**	RunNo: **27021**
Prep Date: **6/22/2015**	Analysis Date: **6/23/2015**	SeqNo: **807506** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		83.6	75.4	113			

Sample ID **LCS-19852**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **19852**	RunNo: **27021**
Prep Date: **6/22/2015**	Analysis Date: **6/23/2015**	SeqNo: **807507** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	64	130			
Surr: BFB	930		1000		93.3	75.4	113			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1506A21**

24-Jun-15

Client: Souder, Miller and Associates

Project: Trunk K #8

Sample ID **MB-19852**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **19852**	RunNo: **27021**
Prep Date: **6/22/2015**	Analysis Date: **6/23/2015**	SeqNo: **807520** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		85.8	80	120			

Sample ID **LCS-19852**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **19852**	RunNo: **27021**
Prep Date: **6/22/2015**	Analysis Date: **6/23/2015**	SeqNo: **807521** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	76.6	128			
Toluene	1.0	0.050	1.000	0	103	75	124			
Ethylbenzene	1.1	0.050	1.000	0	106	79.5	126			
Xylenes, Total	3.1	0.10	3.000	0	105	78.8	124			
Surr: 4-Bromofluorobenzene	0.95		1.000		94.8	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **SMA-FARM** Work Order Number: **1506A21** RcptNo: **1**

Received by/date: 06/23/15

Logged By: **Lindsay Mangin** **6/23/2015 6:58:00 AM**

Completed By: **Lindsay Mangin** **6/23/2015 7:03:42 AM**

Reviewed By: 06/23/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W. Broadway
Farmington, NM, 87401

Phone #: 505 325 7535

email or Fax#: Steven.Moskal@Sandmilles.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☑ Rush Same Day

Project Name: Trunk K #8

Project #: 153615

Project Manager: Steve Moskal

Sampler: J. Sprague

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1506A21	BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / ~~MRO~~)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
6/22	1440	Soil	SB-1 @ 40'	1 4oz / 1 Mason Jar	— / MeOH	-001	X		X													
"	1515	"	SB-1 @ 45'	"	"	-002	X		X													
"	1516	"	SB-1 @ 48'	"	"	-003	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/24/15	1800			6/22/15	1800
6/22/15	1910			6/23/15	0658

Remarks: Invoice EPCO

Please copy

Jesse.Sprague@Sandmilles.com

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 24, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Trunk K #8 OrderNo.: 1506A20

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/23/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1506A20**
Date Reported: **6/24/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Trunk K #8
Lab ID: 1506A20-001 **Matrix:** AQUEOUS

Client Sample ID: GW #1
Collection Date: 6/22/2015 4:00:00 PM
Received Date: 6/23/2015 6:58:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	1300	20		µg/L	20	6/23/2015 1:05:45 PM	R27023
Toluene	4700	100		µg/L	100	6/23/2015 2:01:04 PM	R27023
Ethylbenzene	250	20		µg/L	20	6/23/2015 1:05:45 PM	R27023
Xylenes, Total	2400	30		µg/L	20	6/23/2015 1:05:45 PM	R27023
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%REC	20	6/23/2015 1:05:45 PM	R27023
Surr: 4-Bromofluorobenzene	103	70-130		%REC	20	6/23/2015 1:05:45 PM	R27023
Surr: Dibromofluoromethane	95.5	70-130		%REC	20	6/23/2015 1:05:45 PM	R27023
Surr: Toluene-d8	95.9	70-130		%REC	20	6/23/2015 1:05:45 PM	R27023

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1506A20**

24-Jun-15

Client: Souder, Miller and Associates

Project: Trunk K #8

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R27023**	RunNo: **27023**
Prep Date:	Analysis Date: **6/23/2015**	SeqNo: **807272** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1506A20**

24-Jun-15

Client: Souder, Miller and Associates

Project: Trunk K #8

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R27023**	RunNo: **27023**
Prep Date:	Analysis Date: **6/23/2015**	SeqNo: **807272** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.6	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.4	70	130			
Surr: Toluene-d8	9.5		10.00		95.2	70	130			

Sample ID **100nglcs200ngT2st**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R27023**	RunNo: **27023**
Prep Date:	Analysis Date: **6/23/2015**	SeqNo: **807274** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	19	1.0	20.00	0	95.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1506A20**

24-Jun-15

Client: Souder, Miller and Associates

Project: Trunk K #8

Sample ID **100nglcs200ngT2st**	SampType: **LCS**			TestCode: **EPA Method 8260B: VOLATILES**					
Client ID: **LCSW**	Batch ID: **R27023**			RunNo: **27023**					
Prep Date:	Analysis Date: **6/23/2015**			SeqNo: **807274**	Units: **µg/L**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	108	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.4	70	130			
Surr: Toluene-d8	9.8		10.00		98.4	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM Work Order Number: 1506A20 RcptNo: 1

Received by/date: AM 06/23/15

Logged By: Anne Thorne 6/23/2015 6:58:00 AM Anne Thorne

Completed By: Anne Thorne 6/23/2015 Anne Thorne

Reviewed By: 06/23/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☐	No ☑	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway
Farmington, NM 87401

Phone #: 505 325 7535

email or Fax#: Steven.Moskal@Souderwiller.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☑ Rush Same Day

Project Name: Trunk K #8

Project #: 153615

Project Manager: Steve Moskal

Sampler: J. Sprague

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	300.0 Chloride				Air Bubbles (Y or N)
6/22	1600	Aq	GW # 1	3 VOA	$HgCl_2$	1506A20 -001										X		X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/22/15	1810		Matthew Walters	6/22/15	1810
6/22/15	1910	Matthew Walters		6/23/15	0658

Remarks: Invoice EPCO

Please copy

Jesse.Sprague@souderwiller.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 08, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Trunk K #8 OrderNo.: 1506D26

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/27/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: **1506D26**
Date Reported: **7/8/2015**

CLIENT:	Souder, Miller and Associates	**Client Sample ID:**	MW-1
Facility:	TRUNK K #	**Collection Date:**	6/26/2015 11:10:00 AM
Lab ID:	1506D26-001A	**Received Date:**	6/27/2015 8:45:00 AM
Location:		**Compliance Safe:**	
Matrix:	Aqueous		

Analyses		Result	MDL	Qual	Units	MCL	DF	
EPA METHOD 8260: VOLATILES SHORT LIST								Analyst: **BCN**
SDWIS								Date Analyzed
2990	Benzene	2400	6.5		µg/L		100	7/6/2015 1:33:01 PM
2991	Toluene	3400	11		µg/L		100	7/6/2015 1:33:01 PM
2992	Ethylbenzene	130	0.51		µg/L		5	7/1/2015 11:53:48 PM
XYLENES	Xylenes, Total	980	1.4		µg/L		5	7/1/2015 11:53:48 PM
DCA12D4	Surr: 1,2-Dichloroethane-d4	94.1	0		%REC		5	7/1/2015 11:53:48 PM
BR4FBZ	Surr: 4-Bromofluorobenzene	96.8	0		%REC		5	7/1/2015 11:53:48 PM
DBFM	Surr: Dibromofluoromethane	94.9	0		%REC		5	7/1/2015 11:53:48 PM
BZMED8	Surr: Toluene-d8	101	0		%REC		5	7/1/2015 11:53:48 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1506D26**

08-Jul-15

Client: Souder, Miller and Associates

Project: Trunk K #8

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R27218**	RunNo: **27218**
Prep Date:	Analysis Date: **7/1/2015**	SeqNo: **816036** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **R27218**	RunNo: **27218**
Prep Date:	Analysis Date: **7/1/2015**	SeqNo: **816037** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **R27238**	RunNo: **27238**
Prep Date:	Analysis Date: **7/2/2015**	SeqNo: **817382** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R27238**	RunNo: **27238**
Prep Date:	Analysis Date: **7/2/2015**	SeqNo: **817384** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1506D26**

08-Jul-15

Client: Souder, Miller and Associates

Project: Trunk K #8

Sample ID **100ng LCS**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **R27304**	RunNo: **27304**
Prep Date:	Analysis Date: **7/6/2015**	SeqNo: **818300** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	20	1.0	20.00	0	98.7	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R27304**	RunNo: **27304**
Prep Date:	Analysis Date: **7/6/2015**	SeqNo: **818301** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **SMA-FARM** Work Order Number: **1506D26** RcptNo: 1

Received by/date: 06/27/15

Logged By: **Lindsay Mangin** 6/27/2015 8:45:00 AM

Completed By: **Lindsay Mangin** 6/27/2015 8:58:12 AM

Reviewed By: 06/29/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.5	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W. Broadway
Farmington NM 87401

Phone #: 505 325-7535

email or Fax#: steve.moskal@sudurmiller.com

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:
Trunk K #8

Project #:
EPROD # 153615

Project Manager:
Steve Moskal

Sampler: " "

On Ice: ☑ Yes ☐ No

Sample Temperature: 5.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
6/25/15	1110	Gw	MW-1	VOA x3	HCl	1506026 -001	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/26/15	1707		Mustafa Waele	6/26/15	1707
6/26/15	1747	Mustafa Waele		06/27/15	0845

Remarks: Please invoice direct to EPROD
copy jesse.sprague@sudurmiller.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Appendix D
Archeological Survey Reports

WCRM
Western Cultural Resource Management, Inc.

July 16, 2015

Mr. Tom Long
Enterprise Products Company
614 Reilly Ave.
Farmington, NM 87401

Dear Tom:

As requested, the client copy of our report on the archaeological monitor of the repair locations on the Trunk K pipeline has been submitted electronically to you. During the monitor, no cultural material was encountered.

With completion of the monitor, all stipulations and conditions of cultural resource compliance have been met.

Please contact us if you have any questions concerning the report.

Sincerely,

Charles W. Wheeler, Ph.D., RPA
Vice President

enc.
cc: Jim Copeland, BLM-FFO
Steve Moskal, Souder, Miller, and Associates (electronic)
Tom Lennon, WCRM

COLORADO P.O. Box 2326, Boulder, CO 80306 · Phone 303-449-1151 Fax 303-530-7716
NEW MEXICO 2603 W. Main St., Suite B, Farmington, NM 87401 · Phone 505-326-7420 Fax 505-324-1107
NEVADA 50 Freeport Blvd., Suite 15, Sparks, NV 89431 · Phone 775-358-9003 Fax 775-358-1387
ARIZONA 3014 N. Hayden Rd., Suite 118, Scottsdale, AZ 85251 · Phone 480-423-6837 Fax 480-874-4719

NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.: 133832	2a. Lead (Sponsoring) Agency: Bureau of Land Management, Farmington Field Office	2b. Other Permitting Agency(ies):	3. Lead Agency Report No.:

4. Title of Report: Archaeological Monitoring of the Enterprise Products Company Trunk K Pipeline Repair Locations in San Juan County, New Mexico

Author(s) Cindy J. Bunker

5. Type of Report
☒ **Negative** ☐ **Positive**

6. Investigation Type
☐ Research Design ☐ Survey/Inventory ☐ Test Excavation ☐ Excavation ☐ Collections/Non-Field Study
☐ Overview/Lit Review ☒ Monitoring ☐ Ethnographic study ☐ Site specific visit ☐ Other

7. Description of Undertaking (what does the project entail?):
At the request of Tom Long of Enterprise Products Company, personnel from Western Cultural Resource Management, Inc. (WCRM), monitored activities associated with the repairs for failed repair of leaks on the Trunk K pipeline. Bureau of Land Management, Farmington Field Office (BLM-FFO) stipulations required that protective measures be taken to protect sites LA 180207, LA 180209, and 179210. Temporary barriers were constructed and an archaeological monitor was present.

8. Dates of Investigation:
March 2-June 24, 2015

9. Report Date: July 16, 2015

10. Performing Agency/Consultant: Western Cultural Resource Management, Inc.
Principal Investigator: Thomas J. Lennon
Field Supervisor: Michael J. Proper, Sarah M. Morgan, Cindy J. Bunker, and Virginia Foster
Field Personnel Names: Michael J. Proper, Sarah M. Morgan, Cindy J. Bunker, and Virginia Foster

11. Performing Agency/Consultant
Report No.: WCRM(F)1394
Project No.: 15F014

12. Applicable Cultural Resource Permit No(s): 25-2920-14-PP (BLM-FFO)

13. Client/Customer (project proponent): Enterprise Products Company
Contact: Thomas Long
Address: 614 Reilly Ave, Farmington , New Mexico 87401
Phone: (505) 599-2286

14. Client/Customer Project No.:

15. Land Ownership Status ***(Must be indicated on project map):***

Land Owner	Acres Surveyed*	Acres in APE
TOTALS		

*as calculated in AutoCAD

16. Records Search(es): Cultural resource inventory of the proposed Repair Locations for the Trunk K pipeline, was completed by WCRM (Proper and Bunker 2014). The survey resulted in the documentation of six newly recorded sites two of which required protective measures, LA 180207 and LA 180209. The initial monitoring of the leak repairs was conducted by WCRM (Bunker 2014).

Proper, Michael J., and Cindy J. Bunker
2014 *Cultural Resource Inventory of Enterprise Products Company Trunk K Pipeline Repair Locations 1-6 and Access Road, San Juan County, New Mexico*. Report No. WCRM(F)1339. Western Cultural Resource Management, Inc., Farmington, New Mexico. (NMCRIS 131697)

Bunker, Cindy J.
2014 *Archaeological Monitoring of the Enterprise Products Company Trunk K Pipeline Repair Locations in San Juan County, New Mexico*. Report No. WCRM(F)1349. Western Cultural Resource Management, Inc., Farmington, New Mexico. (NMCRIS 132260)

Date(s) of ARMS File Review	Name of Reviewer(s)	
Date(s) of NR/SR File Review	Name of Reviewer(s)	
Date(s) of Other Agency File Review	Name of Reviewer(s)	Agency

17. Survey Data:

a. Source Graphics ☐ **NAD 27** ☒ **NAD 83**
☒ **USGS 7.5' (1:24,000) topo map** ☐ **Other topo map, Scale:**
☒ **GPS Unit** **Accuracy** ☐ **<1.0m** ☒ **1-10m** ☐ **10-100m** ☐ **>100m**

b. USGS 7.5' Topographic Map Name | **USGS Quad Code**

Fresno Canyon, NM 1985 (Provisional Edition)	36107-E6

c. County(ies): San Juan

17. Survey Data (continued):

d. Nearest City or Town: Blanco, New Mexico

e. Legal Description:

Township (N/S)	Range (E/W)	Section	¼ ¼ ¼
27N	8W	25*	SE1/4, SE1/4, SW¼

*template anchored on SE corner and southern section line

Projected legal description? Yes [ ], No [X] **Unplatted [ ]**

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):

18. Survey Field Methods:

Intensity: ☐ 100% coverage ☐ <100% coverage

Configuration: ☐ block survey units ☐ linear survey units (l x w): ☐ other survey units (specify):

Scope: ☐ non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)

Coverage Method: ☐ systematic pedestrian coverage ☐ other method (describe)

Survey Interval (m): N/A **Crew Size:** 1 **Fieldwork Dates:** March 2, 7, 31, April 1, 2, 3, 6, 23, 24, 27, 28, 29, 30, May 1, 12, 13, 14, 15, and June 8, 9, 22, and 24, 2015.

Survey Person Hours: **Recording Person Hours:** **Total Hours:** 217

Additional Narrative: On March 2, 2015, prior to any construction on the failed repair locations on the Trunk K pipeline, temporary barrier fences were constructed by Michael J. Proper as stipulated by the BLM-FFO. Activities related to the repairs conducted at the failed repair locations were monitored between March 2, and June 24, 2015 by Michael J. Proper, Sarah M. Morgan, Cindy J. Bunker, and Virginia Foster. To protect LA 180207, BLM-FFO stipulated that all vehicular traffic be restricted to the existing ROW and no excavation be conducted within the site boundary. An archaeologist was to be present during any repair activities. To protect LA 180209 a temporary barrier fence was placed along the northern edge of the access road and the eastern edge of the Trunk K ROW along the site boundary. For the protection of LA 180210 a temporary fence was placed along the western edge of the ROW through the site area. As required by the BLM photographs were taken during and after the repairs were completed. Photos are included in Appendix A.

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): The segment of the Trunk K pipeline needing repairs is located on a dissected terrace above the flood plain, on the west side of Largo Canyon, between Cottonwood and Onofre Jaquez canyons. See original survey report for more information (Proper and Bunker 2014).

20.a. Percent Ground Visibility: **b. Condition of Survey Area (grazed, bladed, undisturbed, etc)**

21. CULTURAL RESOURCE FINDINGS ☐ **Yes,** ☒ **No, Discuss Why:** No cultural material was encountered during the monitor.

22. Required Attachments (check all appropriate boxes):

- ☒ **USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn**
- ☐ **Copy of NMCRIS Mapserver Map Check**
- ☐ **LA Site Forms - new sites** (*with sketch map & topographic map*)
- ☐ **LA Site Forms (update) - previously recorded & un-relocated sites** (*first 2 pages minimum*)
- ☐ **Historic Cultural Property Inventory Forms**
- ☐ **List and Description of isolates, if applicable** (see p. 3)
- ☐ **List and Description of Collections, if applicable**

23. Other Attachments:

- ☐ **Photographs and Log**
- ☐ **Other Attachments**

(Describe):

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist: Charles W. Wheeler, Ph.D., RPA

Signature Charles W Wheeler **Date** 7/16/15 **Title (if not PI):**

25. Reviewing Agency:
Reviewer's Name/Date

Accepted ( ) Rejected ( )

Tribal Consultation (if applicable): ☐ **Yes** ☐ **No**

26. SHPO
Reviewer's Name/Date:

HPD Log #:
SHPO File Location:
Date sent to ARMS:

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

1. NMCRIS Activity No.: 133832	2. Lead (Sponsoring) Agency: Bureau of Land Management, Farmington Field Office	3. Lead Agency Report No.:

SURVEY RESULTS: No new cultural materials were encountered during the monitor.

Sites discovered and registered: 0
Sites discovered and NOT registered: 0
Previously recorded sites revisited (*site update form required*): 0
Previously recorded sites not relocated ***(site update form required):*** 0
TOTAL SITES VISITED: 3
Total isolates recorded: 0 **Non-selective isolate recording?** ☐
Total structures recorded (*new and previously recorded, including acequias*): 0

MANAGEMENT SUMMARY: With completion of the monitor, all stipulations and conditions for cultural resource compliance have been met.

IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

SURVEY LA NUMBER LOG

Sites Discovered:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

Previously recorded revisited sites:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

MONITORING LA NUMBER LOG *(site form required)*

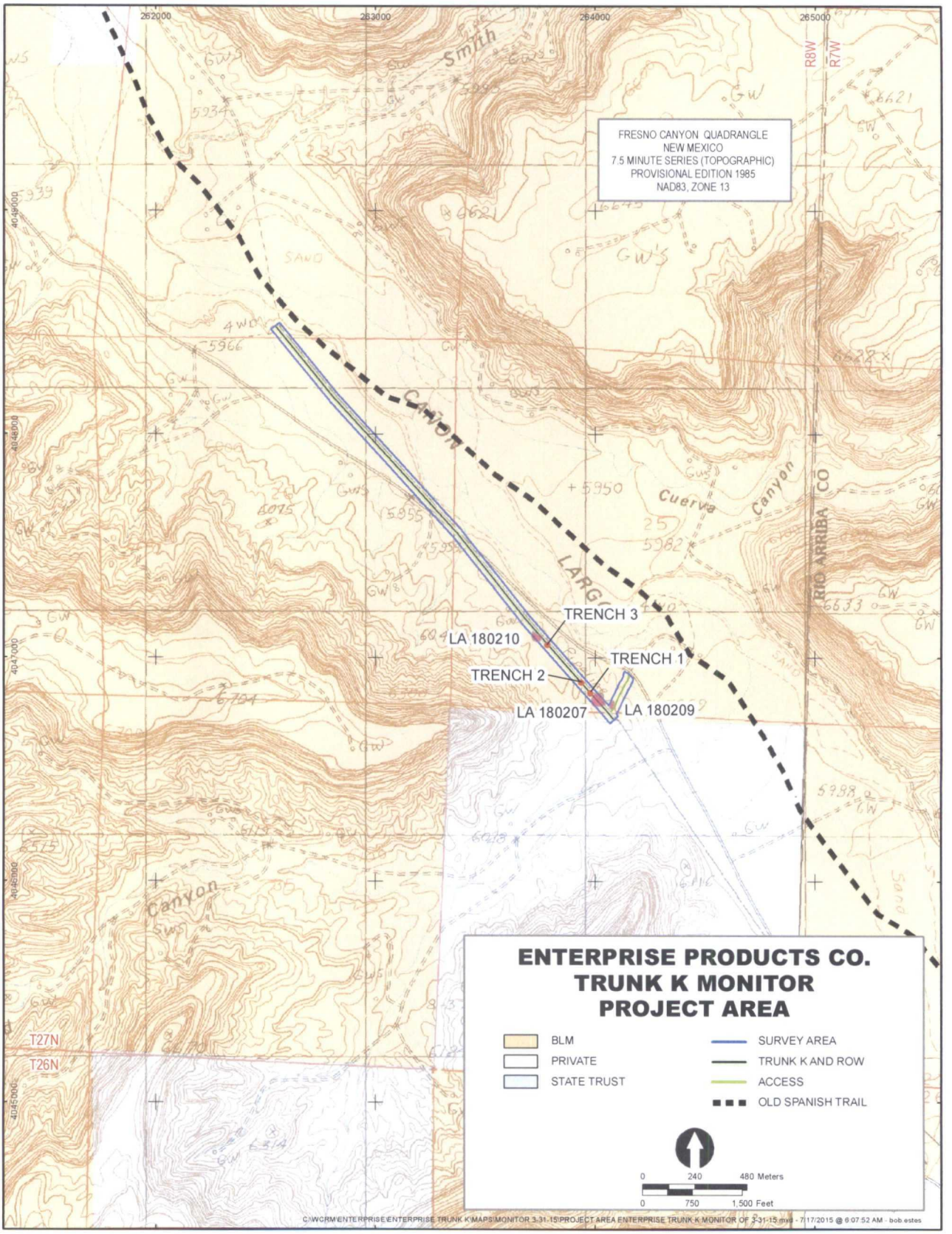
Sites Discovered (*site form required*) : **Previously recorded sites** *(Site update form required):*

LA No.	Field/Agency No.	LA No.	Field/Agency No.
		LA 180207	14F111-S1
		LA 180209	14F111-S4
		LA 180210	14F115-S5

Areas outside known nearby site boundaries monitored? Yes ☐, **No** ☐ **If no explain why:**

TESTING & EXCAVATION LA NUMBER LOG (*site form required*)

Tested LA number(s)	Excavated LA number(s)


FRESNO CANYON QUADRANGLE
NEW MEXICO
7.5 MINUTE SERIES (TOPOGRAPHIC)
PROVISIONAL EDITION 1985
NAD83, ZONE 13
TRENCH 3
LA 180210
TRENCH 1
TRENCH 2
LA 180207
LA 180209
ENTERPRISE PRODUCTS CO.
TRUNK K MONITOR
PROJECT AREA
BLM
PRIVATE
STATE TRUST
SURVEY AREA
TRUNK K AND ROW
ACCESS
OLD SPANISH TRAIL
0 240 480 Meters
0 750 1,500 Feet
T27N
T26N
R8W
R7W
RIO ARRIBA CO
262000
263000
264000
265000
4049000
4048000
4047000
4046000
4045000

Appendix A

Photographs

Trench 1 repair location from southern end of trench looking north.

Trench 1 repair location from northern end of trench looking south toward Site LA 179207.

Trench 1 excavation in progress.

Trench 1 area clean-up after repair completion facing north.

Trench 2 with repaired pipe.

Trench 2 area clean-up after repair completion facing north.

Trench 2 area clean-up after repair completion facing south.

Trench 3 repair location from northern end of trench looking south.

From the northern end of Trench 3 repair location looking towards site LA 180210. The riser is located within the site.

Trench 3 excavation in progress.

Trench 3 excavation in progress.

Trench 3 area clean-up after repair completion facing south.