AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.

App Number: pCS1636528467

144B - 15719

ENTERPRISE PRODUCTS OPERATING, LLC

5/4/2018

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

Form C-144
Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pmt#15719
TRK# 16268

Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:
- ☐ Below grade tank registration
- ☐ Permit of a pit or proposed alternative method
- ☒ Closure of a pit, below-grade tank, or proposed alternative method
- ☐ Modification to an existing permit/or registration
- ☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Enterprise Products Operating, LLC OGRID #:
Address: P.O. Box 4324, Houston, TX 77210
Facility or well name: Potter Canyon Compressor Station Tank #5
API Number: OCD Permit Number: 15719
U/L or Qtr/Qtr NW ¼ NE ¼ Section 19 Township 30N Range 10W County: San Juan
Center of Proposed Design: Latitude 36.802810° Longitude -107.922037° NAD83
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

3.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 5,040 gal Type of fluid: Produced Fluids
Tank Construction material: Steel double walled and bottom
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other Double wall tank with level detection and riser pipe in annular space for monitoring
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*
☒ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
☐ Alternate. Please specify_____

80

6.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☒ Other Enclosed

☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. **Siting criteria does not apply to drying pads or above-grade tanks.**

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. **(Does not apply to below grade tanks)** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ A List of wells with approved application for permit to drill associated with the pit.
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☒ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method

14.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☒ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- ☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☒ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

18.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure ~~Plan (only)~~ ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** 5/4/18

Title: Environmental Spec. **OCD Permit Number:** 15719

19.
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ **Closure Completion Date:** _____

20.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Proof of Closure Notice (surface owner and division)
- ☐ Proof of Deed Notice (required for on-site closure for private land only)
- ☒ Plot Plan (for on-site closures and temporary pits)
- ☒ Confirmation Sampling Analytical Results (if applicable)
- ☒ Waste Material Sampling Analytical Results (required for on-site closure)
- ☒ Disposal Facility Name and Permit Number
- ☒ Soil Backfilling and Cover Installation
- ☐ Re-vegetation Application Rates and Seeding Technique
- ☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Jon Fields Title: Director Field Environmental

Signature: Jon E. Fields Date: 2/12/2018

e-mail address: snolan@eprod.com Telephone: 713-381-6595

Souder, Miller & Associates ♦ 401 W. Broadway ♦ Farmington, NM 87401
(505) 325-7535 ♦ (800) 519-0098 ♦ fax (505) 326-0045

January 4, 2018

SMA #5125760

Mr. Tom Long
Enterprise Products Operating, LLC
Field Environmental-San Juan Basin
614 Reilly Avenue
Farmington, NM 87401

BGT CLOSURE PACKET FOR
POTTER CANYON COMPRESSOR STATION TANK #5
LATITUDE 36.802810°, LONGITUDE -107.922037°

Dear Mr. Long:

Souder, Miller and Associates (SMA) has compiled the following BGT Closure Packet including Form C-144 in accordance with the NMOCD Pit Rules (19.15.17 NMAC). The tank is located at latitude 36.802810°, longitude -107.922037° within the fenced area of the Potter Canyon Compressor Station. Tank information is presented in Table 1.

Table 1: Tank Information

Name	Potter Canyon Compressor Station Tank #5			
Location	Latitude/Longitude		Section, Township, Range	
	36.802810°	-107.922037°	NW ¼ / NE ¼ Unit B Section 19	T30N R10W
Date of Site Visit	August 18, 2017			
County	San Juan			
Land Owner	BLM			
Tank Capacity	5,040 Gallons (on EPCO SPCC Tank List)			
Tank Dimensions	12' Diameter x 6'6" Height			
Tank Serial Number (If Available)	Unknown			
Tank Contents	Produced fluids			
Tank Construction Notes	Steel double wall tank with level detection and riser pipe in annular space for monthly monitoring			

Siting Criteria (19.15.17.10 NMAC)

The below-ground tank (BGT) is located at the Potter Canyon Compressor Station at an elevation of 6,364 feet above mean sea level (amsl). The BGT meets all siting criteria listed in 19.15.17.10 NMAC with the exceptions for which variances are requested.

Depth to groundwater at the site is estimated to be at 113 feet below ground surface (bgs). This data is supported by the depth to groundwater in nearby NMOCD permitted well API# 3004526459 (Schumacher #10A). This data is further supported by the depth to groundwater in a nearby well permitted by the New Mexico Office of the State Engineer (OSE) [2]. The BGT base is estimated at 6 feet bgs. Because the BGT base is thus estimated to be greater than 25 feet above the groundwater level, a variance is not being requested for this siting criterion.

Figure 1 shows the vicinity of the BGT location and the location of the nearby OSE Wells. The base layer of Figure 1 is the ESRI provided Imagery Topo Map[3] and includes USGS Blue Lines[4]. An aerial imagery map of the site is provided as Figure 2 which shows the vicinity of the BGT with 500' and 1000' buffers. Figure 3 demonstrates the BGT is not located within 100 feet of any continuous flowing watercourse, any other significant watercourse, sinkhole, lakebed, wetlands or playa lake as measured from the ordinary high water mark[5], or within 200 feet of a spring or freshwater well used for public or livestock consumption, as indicated by the aerial photo[6] and iWaters map layers[2], or within 300 horizontal feet of any permanent residences, schools, hospitals, institutions or churches.

The BGT subject to the attached application for registration under 19.15.17 NMAC is located within the Potter Canyon Compressor Station boundaries and was in existence prior to the promulgation of 19.15.17 NMAC. A review of the best available data and a visual inspection of the siting criteria of 19.15.17 NMAC specific to the BGT in question demonstrate that the BGT does not appear to pose a threat to fresh water, public health or the environment.

Local Geology and Hydrology

The Potter Canyon Compressor Station is located about 4 miles southeast of Aztec, New Mexico, between Aztec and Blanco, New Mexico. The Compressor Station is located on an eroded surface of sandstone, shales and conglomerates belonging to the Paleocene Nacimiento Formation[7]. Seven miles to the south, along the San Juan River, the surficial geology is composed of fluvial quaternary alluvium associated with the San Juan River[8].

Groundwater is estimated to be about 113 feet bgs (6,251 feet amsl) at this site, based on the following documentation:

- NMOCD API # 3004520992, Schumacher #10A, Cathodic Protection Well reports depth to groundwater at 180 feet bgs. This well is located 0.3 miles west, in a geologic and hydrologic regime very similar to the BGT at an elevation of 6,431

feet amsl. The difference in elevation allows a depth to groundwater estimate of 113 feet bgs.

- OSE POD record SJ-01362 is located 0.6 miles to the southeast, in a geologic and hydrologic regime very similar to the BGT location. SJ-01362 reports depth to groundwater at 190 feet bgs and is has an elevation 126 feet above the BGT at 6,490 feet amsl. The difference in elevation allows a conservative depth to groundwater estimate of 64 feet bgs.

Regional Geology and Hydrology

The San Juan Basin is located in the Navajo section of the Colorado Plateau and is characterized by broad open valleys, mesas, buttes and hogbacks. Away from major valleys and canyons, topographic relief is generally low. Native vegetation is sparse and shrubby consisting primarily of desert scrub (sage and chamisa) in the lower elevations and juniper and piñon in the higher elevations. Drainage of the San Juan Basin is by the San Juan River and its associated tributaries, including the La Plata and the Animas Rivers. The San Juan River is a tributary of the Colorado River. The climate is arid to semi-arid with an average annual precipitation of 8 to 10 inches. Soils within the basin consist of physically weathered parent rock. Aeolian depositional systems are responsible for a majority of the material transport in the San Juan Basin, fluvial systems are also present though less predominant[10].

The primary aquifers in the San Juan Basin are contained in Cretaceous and Tertiary sandstones, as well as Quaternary Alluvial Deposits[10]. The Nacimiento Formation of Paleocene age occurs at the surface in a broad belt at the western and southern edges of the central San Juan Basin and dips beneath the San Jose Formation in the center. The lower part of the Nacimiento Formation is composed of interbedded black carbonaceous mudstones and white coarse grained sandstones. The upper part is comprised of mudstones and sandstones. Shales and conglomerates are often interbedded within the mudstones and sandstones, but they are not the primary rock type. The Nacimiento Formation is generally slope forming, even in the sandstone units. Thickness of the Nacimiento ranges from 418 to 2,232 feet[11]. Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation are between 0 and 1,000 feet deep in this section of the basin. Wells within these bodies flow from 16 to 100 gallons per minute (gpm) and transmissivities are expected to be 100 ft^2/d. Groundwater within these units flows towards the San Juan River[10].

Closure Activities

On August 18 and 21, 2017, SMA performed BGT closure sampling and initial field screening on hydrocarbon impacted soils from near Tank 5 BGT and Tank 1, an above ground condensate tank, at the Potter Canyon Compressor Station. Field screening and laboratory results confirmed a release from both tanks. From November 6 to 10, 2017, SMA oversaw excavation activities until the extent of the release was determined. NMOCD witnessed confirmation sampling of the walls and base of the excavation, which measured approximately 39 feet by 72 feet, and ranged from 4 to 15 feet deep. The

excavation was backfilled upon receiving closure sample results. The site has not been revegetated due to the location being on an active facility.

Final laboratory results for the walls and base demonstrated hydrocarbon concentrations below NMOCD regulatory standards for releases and spills. Samples S-35, S-38, and S-43 exceeded NMOCD regulatory standards for releases and spills and therefore removed by excavation. As indicated in Figure 4, confirmation samples S-36, S-37, S-45 and S-48 were collected in the area nearest to Tank #5 BGT. The excavation was approved for backfill with clean soil.

Date	Time	Sample ID	Sample Location	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8015 MRO	Method 8021 Benzene	Method 8021 BTEX	Method 300.0 Chloride
NMOCD Guidelines		NMOCD Site Ranking: 10			1,000 mg/kg			10 mg/kg	50 mg/kg	NE
8/21/2017	11:40	SB-2	69' east of Tank 5	3	<3.6	<9.6	<48	<0.018	<0.161	NA
8/21/2017	12:12	PH-2	36' east of Tank 5	4	<18	42	<48	<0.091	<0.821	NA
8/21/2017	12:18	PH-3	59' east of Tank 5	4	<3.7	14	<47	<0.018	<0.166	NA
11/8/2017	13:25	S-27*	South wall, west side	0-5	<3.7	<9.3	<47	<0.018	<0.165	<30
11/8/2017	13:30	S-28*	South wall, east side	0-6	<3.6	<9.3	<47	<0.018	<0.162	<30
11/8/2017	13:34	S-29*	West wall, south side	0-7	<3.6	<10	<51	<0.018	<0.163	<30
11/8/2017	13:40	S-30*	West wall, north side	0-7	<3.9	12	<48	<0.020	<0.176	<30
11/8/2017	13:45	S-31*	East wall, south side	0-10	4.1	19	<47	<0.018	<0.158	<30
11/8/2017	13:52	S-32*	East wall, north side	0-10	66	38	<48	<0.088	<0.798	<30
11/8/2017	15:05	S-35	Base, northeast quad	8-10	660	230	130	0.11	55.5	<30
11/8/2017	15:10	S-36*	Base, southeast quad	6-8	<19	14	<51	<0.093	<0.843	<30
11/8/2017	15:14	S-37*	Base, southwest quad	4-8	280	270	160	<0.10	<0.90	<30
11/8/2017	15:18	S-38	Base, northwest quad	6-10	3,000	1,000	490	0.95	214	<30
11/9/2017	9:43	S-40*	West wall, north side	0-6	<3.4	11	52	<0.018	<0.195	<30
11/9/2017	9:51	S-41*	North wall, west side	0-6	<4.3	<9.4	<47	<0.021	<0.192	<30
11/9/2017	9:57	S-42*	North wall, east side	0-6	<4.1	13	<48	<0.020	<0.183	<30
11/9/2017	10:05	S-43	Base, north north quad	6	1,100	310	170	0.25	68.5	<30
11/9/2017	10:12	S-44*	East wall, north side	0-5	<4.0	<9.7	<48	<0.020	<0.181	<30
11/10/2017	12:15	S-47*	Base, northeast quad	12-15	270	220	140	<0.10	<0.90	<30
11/10/201	13:25	S-48*	Base, northwest quad	7-11	45	69	130	<0.11	<0.95	<30
11/10/2017	14:22	S-49*	Base, north north quad	10	180	140	130	<0.097	<3.53	<30

NE: Not Established
NA: Not Analyzed
* Final confirmation sample

If there are any questions regarding this report, please contact myself or Shawna Chubbuck at 505-325-7535.

Sincerely,
Souder, Miller & Associates

Ashley Maxwell
Staff Scientist

Shawna Chubbuck
Senior Scientist

FIGURES:
Figure 1 – Vicinity Map
Figure 2 – Site Map with 500' and 1000' buffers
Figure 3 – Site Map with 100', 200' and 300' buffers
Figure 4 – Site Map with Sample Locations

ATTACHMENTS:
Form C-144
Variance Request
Tank Diagrams
Operation and Maintenance Plan
Depth to Groundwater Documentation
Closure Notification
Form C-138
Laboratory Analytical Reports

References

[2]Office of the State Engineer (OSE) Water Administrative Technical Engineering Resource System (WATERS), September 4, 2015. *"Water Wells – 2015 – OSE"*, released September, 2015. http://gstore.unm.edu/apps/rgis/datasets/6925a8e3-6f8d-4334-a15e-bf95a11fdaaa/OSE_Wells_May_2015.original.zip

[3]ESRI ArcGIS Online, *"USGSImageryTopo"*, August, 2013. The USGS Imagery Topo base map service from The National Map is a combination of imagery and contours, along with vector layers, such as geographic names, governmental unit boundaries, hydrography, structures, and transportation, to provide a composite base map that resembles the US Topo product. Vector data sources are the National Atlas for small scales, and The National Map for medium to large scales. Imagery data sources are Blue Marble: Next Generation at small scales and NAIP at large scales, with Global Land Survey (Landsat) imagery for medium scales that lack NAIP coverage. Coordinate System: Web Mercator Auxiliary Sphere (WKID 102100) http://www.arcgis.com/home/item.html?id=c641cc5c41d44faba509959748098471

[4]New Mexico Oil and Gas Association Training Manual for 19.15.17 NMAC (Pit Rule) *"NMOGA & NMOCD Pit Rules Training.pdf"* State of New Mexico, October 17, 2014.

[5]National Wetlands Inventory, September 2002. *"San Juan Wetland/Riparian Project"*, R02Y02P01 San Juan, NMRGIS geodatabase. http://rgis.unm.edu/gstore/datasets/757361ef-2000-4f2a-aff8-15fa0a8bd5db/nwi_san_juan_02.original.zip

[6]Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community. November 2015 *"World Imagery"*, Coordinate System: Web Mercator Auxiliary Sphere (WKID 102100) http://server.arcgisonline.com/arcgis/services/World_Imagery/MapServer

[7]Green, Gregory N., Jones, Glen E., 2009. *"Digital Geologic Map of New Mexico – Formations"* http://gstore.unm.edu/apps/rgis/datasets/51349b33-92eb-4ab8-9217-81c82b5c3afa/nmmapdd83shp.original.zip

[8]USGS Mineral Resources On-Line Spatial Data, Green, G.N., and Jones, G.E., 1997, The Digital Geologic Map of New Mexico in ARC/INFO Format: U.S. Geological Survey Open-File Report 97-0052, 9p. http://pubs.er.usgs.gov/publication/ofr9752 http://mrdata.usgs.gov/geology/state/state.php?state=NM

[9]Source: "Potter Canyon Compressor Station and Wash Elevations" 36.802810° N, -107.922037° W. Google Earth. May 2, 2013. November 28, 2015. Elevation Datum: NAVD27.

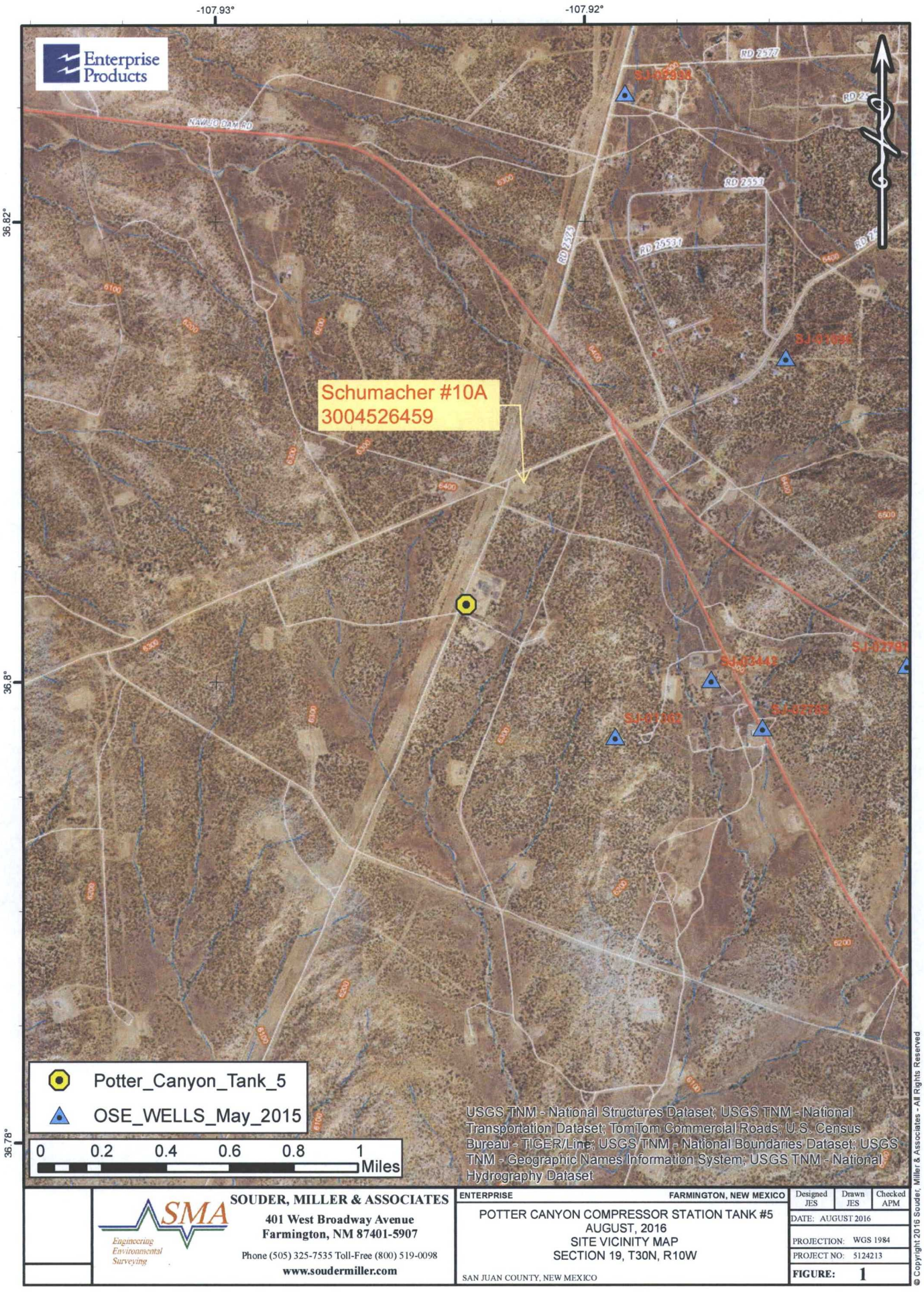
[10] Stone, et.al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6.

[11]Kelley, et. Al., 2014, Hydrologic Assessment of Oil and Gas Resource Development of the Mancos Shale in the San Juan Basin, New Mexico. Open-File Report 566, New Mexico Bureau of Mines and Mineral Resources.

Potter Canyon Compressor Station, Tank #5 Variance Request

Enterprise requests a variance for the items listed below. The requested variances, per 19.15.17.15A, provide equal or better protection of fresh water, public health and the environment.

1. Signage
    - BGT is located within a facility signed appropriate to NMAC 20.2.70, Title V General Construction Permit. The sign is legible and contains the operator's name, the location of the compressor station in decimal degrees and township section and range, and emergency contact telephone numbers. Additional signage relevant to the Title V air quality permit is also present and provides equal or better protection of fresh water, public health and the environment.
2. 2008 Pit Rules
    - Potter Compressor Tank #5 was installed prior to the 2008 pit rules. The BGT does not pose an imminent threat to the protection of fresh water, public health or the environment.



SOUDER, MILLER & ASSOCIATES
401 West Broadway Avenue
Farmington, NM 87401-5907
Phone (505) 325-7535 Toll-Free (800) 519-0098
www.soudermiller.com

ENTERPRISE — FARMINGTON, NEW MEXICO

POTTER CANYON COMPRESSOR STATION TANK #5
AUGUST, 2016
SITE VICINITY MAP
SECTION 19, T30N, R10W
SAN JUAN COUNTY, NEW MEXICO

Designed	Drawn	Checked
JES	JES	APM

DATE: AUGUST 2016
PROJECTION: WGS 1984
PROJECT NO: 5124213
FIGURE: 1

SOUDER, MILLER & ASSOCIATES
401 West Broadway Avenue
Farmington, NM 87401-5907
Phone (505) 325-7535 Toll-Free (800) 519-0098
www.soudermiller.com

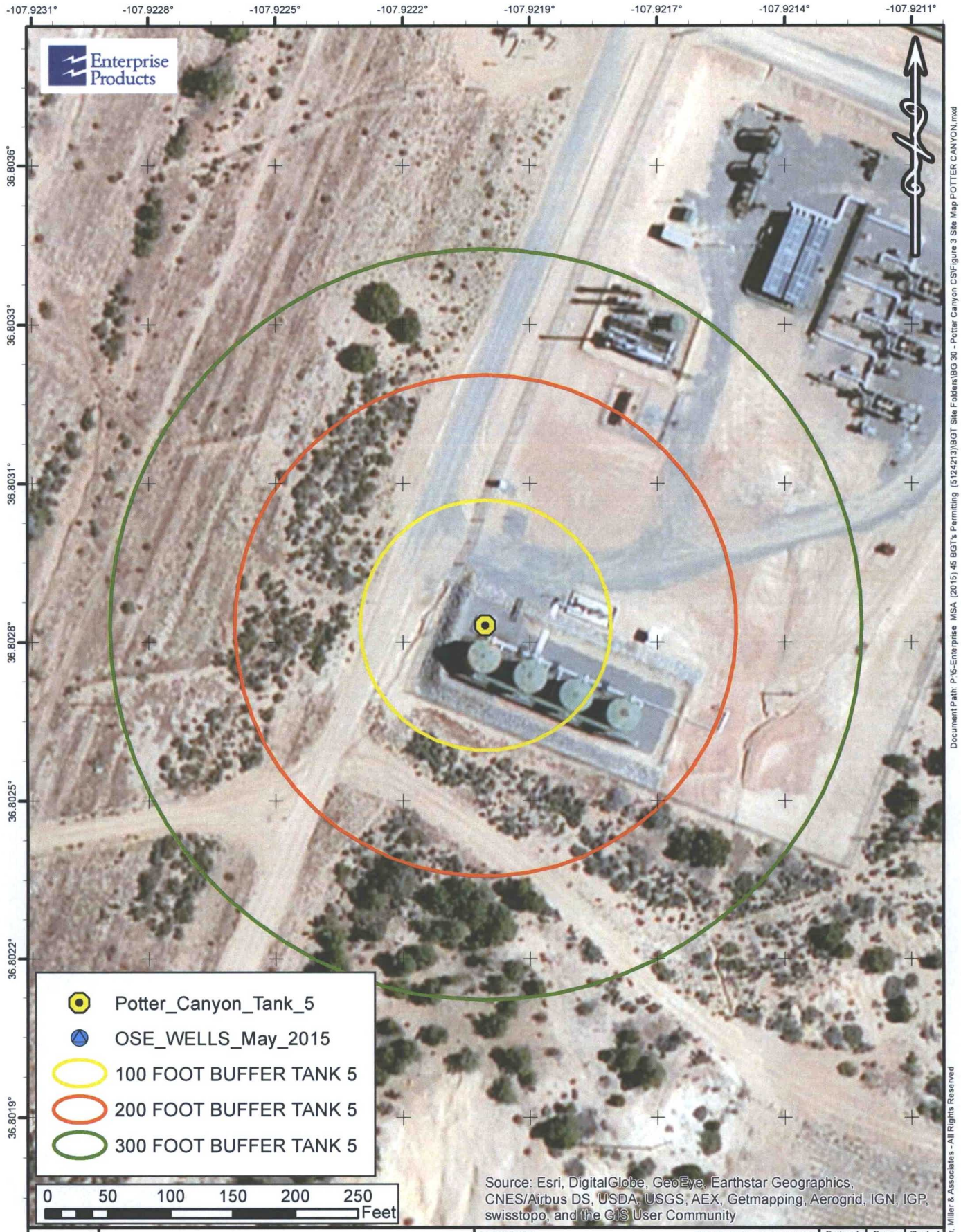
ENTERPRISE FARMINGTON, NEW MEXICO

POTTER CANYON COMPRESSOR STATION TANK #5
AUGUST, 2016
SITE MAP
SECTION 19, T30N, R10W
SAN JUAN COUNTY, NEW MEXICO

Designed	Drawn	Checked
JES	JES	APM

DATE: AUGUST 2016
PROJECTION: WGS 1984
PROJECT NO: 5124213
FIGURE: 2

Document Path: P:\S-Enterprise MSA (2015) 45 BGT's Permitting (5124213)\BGT Site Folders\BG 30 - Potter Canyon CS\Figure 2 Site Map POTTER CANYON.mxd



Document Path: P:\6-Enterprise MSA (2015) 46 BGT's Permitting (5124213)\BGT Site Folders\BG 30 - Potter Canyon CS\Figure 3 Site Map POTTER CANYON.mxd

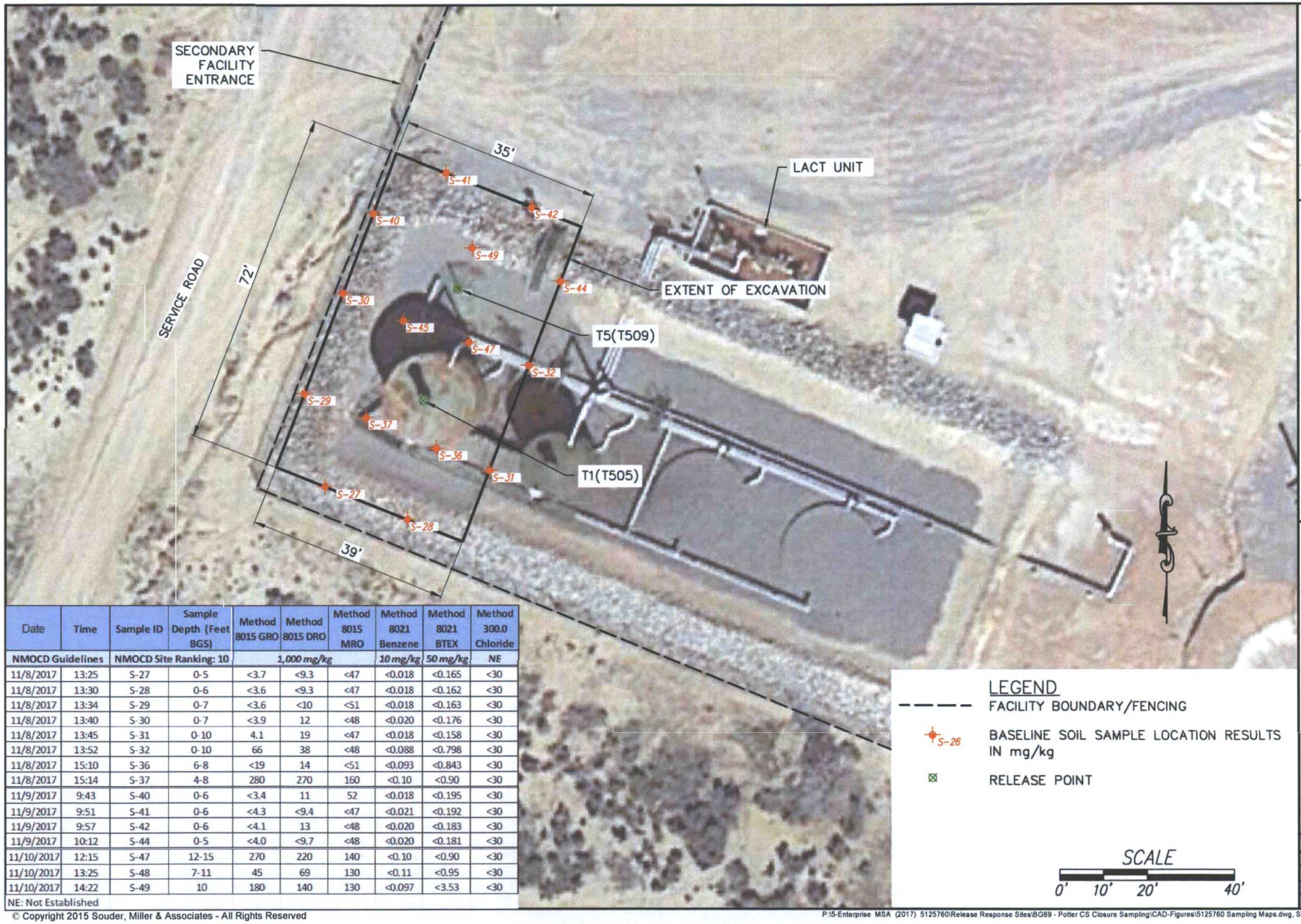
SOUDER, MILLER & ASSOCIATES
401 West Broadway Avenue
Farmington, NM 87401-5907
Phone (505) 325-7535 Toll-Free (800) 519-0098
www.soudermiller.com

ENTERPRISE — FARMINGTON, NEW MEXICO

POTTER CANYON COMPRESSOR STATION TANK #5
AUGUST, 2016
SITE MAP
SECTION 19, T30N, R10W
SAN JUAN COUNTY, NEW MEXICO

Designed	Drawn	Checked
JES	JES	APM

DATE: AUGUST 2016
PROJECTION: WGS 1984
PROJECT NO: 5124213
FIGURE: 3



Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8015 MRO	Method 8021 Benzene	Method 8021 BTEX	Method 300.0 Chloride
NMOCD Guidelines		NMOCD Site Ranking: 10		1,000 mg/kg			10 mg/kg	50 mg/kg	NE
11/8/2017	13:25	S-27	0-5	<3.7	<9.3	<47	<0.018	<0.165	<30
11/8/2017	13:30	S-28	0-6	<3.6	<9.3	<47	<0.018	<0.162	<30
11/8/2017	13:34	S-29	0-7	<3.6	<10	<51	<0.018	<0.163	<30
11/8/2017	13:40	S-30	0-7	<3.9	12	<48	<0.020	<0.176	<30
11/8/2017	13:45	S-31	0-10	4.1	19	<47	<0.018	<0.158	<30
11/8/2017	13:52	S-32	0-10	66	38	<48	<0.088	<0.798	<30
11/8/2017	15:10	S-36	6-8	<19	14	<51	<0.093	<0.843	<30
11/8/2017	15:14	S-37	4-8	280	270	160	<0.10	<0.90	<30
11/9/2017	9:43	S-40	0-6	<3.4	11	52	<0.018	<0.195	<30
11/9/2017	9:51	S-41	0-6	<4.3	<9.4	<47	<0.021	<0.192	<30
11/9/2017	9:57	S-42	0-6	<4.1	13	<48	<0.020	<0.183	<30
11/9/2017	10:12	S-44	0-5	<4.0	<9.7	<48	<0.020	<0.181	<30
11/10/2017	12:15	S-47	12-15	270	220	140	<0.10	<0.90	<30
11/10/2017	13:25	S-48	7-11	45	69	130	<0.11	<0.95	<30
11/10/2017	14:22	S-49	10	180	140	130	<0.097	<3.53	<30

NE: Not Established

LEGEND

FACILITY BOUNDARY/FENCING

S-26 BASELINE SOIL SAMPLE LOCATION RESULTS IN mg/kg

RELEASE POINT

SCALE

0' 10' 20' 40'

Rev #	Date	Description

ENTERPRISE

FARMINGTON, NEW MEXICO

SOIL SAMPLE LOCATION MAP
TANK 5 AND TANK 1 RELEASE SITE
POTTER CANYON COMPRESSOR STATION
SECTION 19, T30N, R10W

SAN JUAN COUNTY

Souder, Miller & Associates
401 West Broadway Avenue
Farmington, NM 87401-5907
Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045
www.soudermiller.com
Serving the Southwest & Rocky Mountains

Designed	Drawn	Checked
SAH	DJB	RSA

Date: December 2017

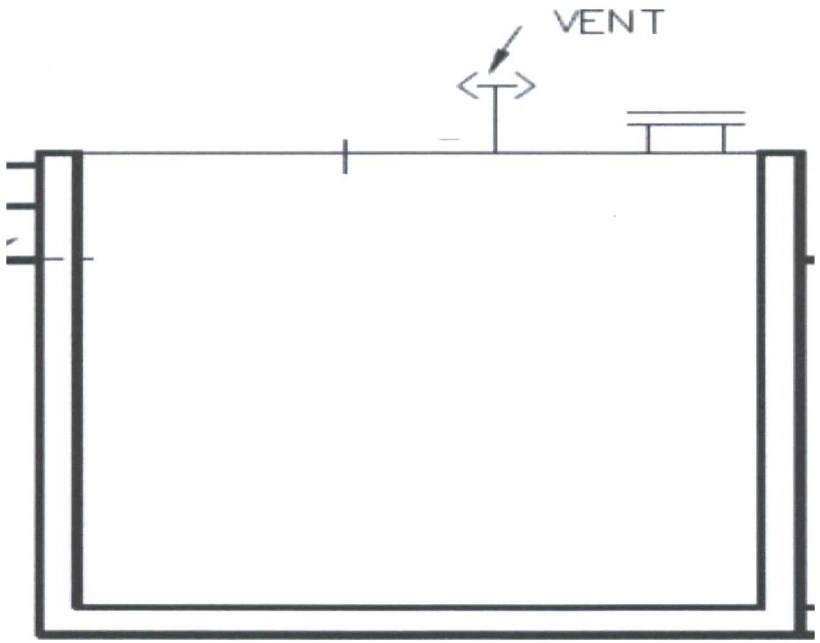
Scale: Horiz. 1" = 20' Vert. NA

Project No. 5125760

Figure 4

P:\5-Enterprise MSA (2017) 5125760\Release Response Sites\BG69 - Potter CS Closure Sampling\CAD-Figures\5125760 Sampling Maps.dwg, SAH, 12/28/2017 1:47 PM

Below Grade Tank Diagram
Potter Canyon Compressor Station Tank #5



Operational Plan

NMAC 19.15.17.12

OPERATIONAL REQUIREMENTS

Enterprise will operate and maintain the below-grade tank to contain liquids and solids and maintain the secondary containment system to prevent contamination of fresh water and protect public health and the environment.

Enterprise shall not discharge into or store any hazardous waste in the below-grade tank.

If the below-grade tank develops a leak, Enterprise shall remove all liquid above the damage or leak within 48 hours of discovery, notify the appropriate division office and repair the damage or replace the below-grade tank as applicable per 19.15.29 NMAC.

Enterprise shall operate and install the below-grade tank to prevent the collection of surface water run-on.

Enterprise shall not allow a below-grade tank to overflow or allow surface water run-on to enter the below-grade tank.

Enterprise shall remove any measurable layer of oil from the fluid surface of a below-grade tank.

Enterprise shall inspect the below-grade tank for leakage and damage at least monthly.

Enterprise shall document the integrity of each tank at least annually and maintain a written record of the integrity for five years.

Enterprise shall maintain adequate freeboard to prevent overtopping of the below-grade tank.

CLOSURE REQUIREMENTS

Enterprise shall not commence closure without first obtaining approval of the closure plan submitted with the permit application or registration pursuant to 19.15.17.13 NMAC.

Enterprise shall close the below-grade tank by first removing all contents and transferring the materials to a division approved facility.

Enterprise shall test the soils beneath the below-grade tank as follows:

A minimum of one composite sample to include any obvious stained or wet soils, or other evidence of contamination shall be collected from under the below-grade tank and the sample shall be analyzed for the identified constituents with respective concentrations listed in Table I of 19.15.17.13 NMAC below.

Table I
Closure Criteria for Soils Beneath Below-Grade Tanks, Drying Pads Associated with Closed-Loop Systems and Pits where Contents are Removed

Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤50 feet	Chloride	EPA 300.0	600 mg/kg
	TPH	EPA SW-846 Method 418.1	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
51 feet-100 feet	Chloride	EPA 300.0	10,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
> 100 feet	Chloride	EPA 300.0	20,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

*Or other test methods approved by the division
**Numerical limits or natural background level, whichever is greater
*** Or Method 8015 with GRO, DRO, & MRO

If any contaminant concentration is higher than the above parameters, the division may require additional delineation upon review of the results and Enterprise must receive approval before proceeding with closure.

If all contaminant concentrations are less than or equal to the parameters listed above, Enterprise can proceed to backfill the excavation with non-waste containing, uncontaminated, earthen material.

CLOSURE NOTICE

Enterprise shall notify the appropriate division district office verbally, and in writing, at least 72 hours, but not more than one week, prior to any closure operation. The notice shall include the Enterprise name and the location to be closed, including the unit letter, section, township, and range.

Enterprise shall notify the surface owner by certified mail (return receipt requested) that Enterprise plans closure operations at least 72 hours, but not more than one week, prior to any closure operation. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement.

CLOSURE REPORT AND BURIAL IDENTIFICATION

Within 60 days of closure completion, Enterprise shall submit a closure report on form C-144, with necessary attachments to document all closure activities including sampling results, information required by 19.15.17 NMAC, and details on back-filling, capping and covering, where applicable. In the closure report, Enterprise shall certify that all information in the report and attachments is correct and that Enterprise has complied with all applicable closure requirements and conditions specified in the approved closure plan.

TIMING REQUIREMENTS FOR CLOSURE

Within 60 days of cessation of operations, Enterprise shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility.

Within six months of cessation of operations, Enterprise shall remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. If there is any equipment associated with a below-grade tank, Enterprise shall remove the equipment, unless the equipment is required for some other purpose.

SOIL COVER DESIGNS FOR BELOW-GRADE TANKS

The soil cover for closures after site contouring (where Enterprise has removed the below-grade tank and, if necessary, remediated the soil beneath the below-grade tank to chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0) shall consist of the background thickness of topsoil or one foot of suitable material, whichever is greater.

Enterprise shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

RECLAMATION AND RE-VEGETATION

The site has not been revegetated due to the location being on an active facility.

RECLAMATION OF AREAS NO LONGER IN USE

All areas disturbed by the closure of the below-grade tanks, except areas reasonably needed for production operations or for subsequent drilling operations, shall be reclaimed as early and as nearly as practicable to their original condition or their final land use and shall be maintained to control dust and minimize erosion to the extent practicable.

Enterprise shall replace topsoils and subsoils to their original relative positions and shall be contoured to achieve erosion control, long-term stability and preservation of surface water flow patterns. The disturbed area then shall be reseeded in the first favorable growing season following closure of the below-grade tank.

Reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.

OTHER REGULATORY REQUIREMENTS

The re-vegetation and reclamation obligations imposed by other applicable federal or tribal agencies on lands managed by those agencies shall supersede these provisions and govern the obligations of any operations subject to those provisions, provided the other requirements provide equal or better protection of fresh water, human health and the environment.

Enterprise shall notify the division when reclamation and re-vegetation are complete.

1312

E

30-045-26459

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC. Location: Unit P Sec. 18 Twp 30 Rng 10

Name of Well/Wells or Pipeline Serviced SCHUMACHER #10A

cps 1920w

Elevation 6419' Completion Date 12/10/87 Total Depth 540' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used

N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 180' NO SAMPLE

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 485', 465', 455', 445', [illegible] 395', 385'

Depths vent pipes placed: 525'

Vent pipe perforations: 320'

Remarks: gb #1

RECEIVED
MAY 31 1991
OIL CON. DIV
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

MERIDIAN OIL

FM-07-0238 (Rev. 10-82)

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Bugle

Drilling Log (Attach Hereto) ☒ Completion Date 12-10-87

CPS #	Well Name, Line or Plant:	Work Order #	Status:	Ins. Union Check
1920-W	Schumacher #10-A		600 SE = 87	☒ Good ☐ Bad

Location:	Anode Size:	Anode Type:	Size Bit:
P18-30-10	2" x 60"	Duriron	6 3/4"

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
540'	520'				

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	485'	465'	455'	445'	435'	425'	415'	405'	395'	385'
Anode Output (Amps)	6.0	7.2	6.5	5.6	7.3	7.1	6.6	6.6	6.3	5.4
Anode Depth	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Output (Amps)	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20

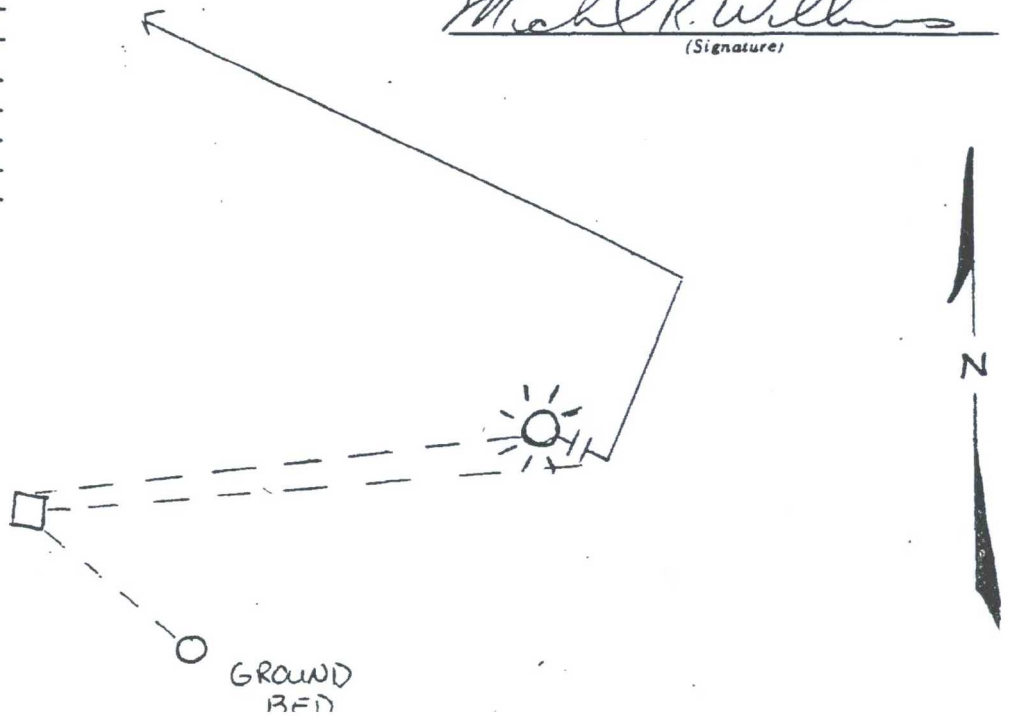
Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.97	Amps 26.0	Ohms .460	ELEVATION = 6419	

Remarks: DRILLED 540'; LOGGED 520'. DRILLER SAID WATER AT 180' NOT ENOUGH FOR SAMPLE. INSTALLED 525' of 1" PVC VENT PIPE; PERFORATED BOTTOM 320'

Rectifier Size: 40 V 16 A
Addn'l Depth 20 ✓
Depth Credit:
Extra Cable: 30' ✓
Ditch & 1 Cable: 60' ✓
Ditch & 2 Cable: 170' ✓
25' Meter Pole:
20' Meter Pole: 1 ✓
10' Stub Pole:
Junction Box: 1 ✓

All Construction Completed

Mark R. Williams
(Signature)



4300 00 ✓
140.00 ✓
750 ✓
2580 ✓
9350 ✓
300 00 ✓
40 00
910 00
5816.80
290.84
6107.64 ✓

OK

6449

BURGE CORROSION SYSTEMS INC
P.O. BOX 1359
AZTEC, NEW MEXICO 87410
DRILLING AND LOADING LOG

JOB NUMBER 147 HOLE DIAMETER 6 1/8 IN DATE 12-10-97
WELL NAME Schumacher #10A HOLE DEPTH 540 FT FINAL READING ____ VOLTS
COMPANY NAME Meridian NUM OF ANODES ____ FINAL READING ____ AMPS
LEGAL DESCRIPTION 1/4 ___ S 18 T 30 R 10 WATER DEPTH 180 FT FINAL READING ____ OHMS

CPS 1920 cw

HOLE DEPTH	SOIL TYPE	LOG AMPS	INITAL AMPS	FINAL AMPS	HOLE DEPTH	SOIL TYPE	LOG AMPS	INITAL AMPS	FINAL AMPS	HOLE DEPTH	SOIL TYPE	LOG AMPS	INITAL AMPS	FINAL AMPS
5	Sandstone				245	"				485	"			
10	"				250	"				490	"			
15	"				255	"				495	"			
20	"				260	"				500	"			
25	"				265	"				505	"			
30	"				270	"				510	Sandy Shale			
35	"				275	"				515	"			
40	"				280	"				520	"			
45	"				285	"				525	"			
50	"				290	"				530	"			
55	"				295	"				535	"			
60	"				300	"				540	"			
65	"				305	"				545				
70	"				310	"				550				
75	"				315	"				555				
80	"				320	"				560				
85	"				325	"				565				
90	"				330	"				570				
95	"				335	"				575				
100	"				340	"				580				
105	"				345	"				585				
110	"				350	"				590				
115	"				355	"				595				
120	"				360	"				600				
125	"				365	"				605				
130	"				370	"				610				
135	"				375	"				615				
140	"				380	"				620				
145	"				385	"				625				
150	"				390	Shale				630				
155	"				395	"				635				
160	"				400	"				640				
165	"				405	"				645				
170	"				410	"				650				
175	water sand				415	"				655				
180	"				420	"				660				
185	"				425	"				665				
190	"				430	"				670				
195	Shale				435	"				675				
200	"				440	"				680				
205	"				445	"				685				
210	Sandstone				450	"				690				
215	"				455	"				695				
220	"				460	"				700				
225	"				465	"				705				
230	"				470	"				710				
235	"				475	"				715				
240	"				480	"				720				

MERIDIAN OIL

P. O. BOX 4289-Phone 327-0251
FARMINGTON, NM

Date 12-10-87

DEEP WELL GROUNDBED LOG

Company Burlé

Well No. #10-A Location P18-30-10 Volts Applied 11.97 .460 Amperes 26.0

0				230	.7			455	2.7			680	① 485 - 4.3 - 6.0		
5				235	.9			460	2.8			685	② 465 - 4.0 - 7.2		
10				240	1.0			465	2.6			690	③ 455 - 3.9 - 6.5		
15				245	1.6			470	2.3			695	④ 445 - 3.9 - 5.6		
20				250	1.9			475	1.9			700	⑤ 435 - 4.0 - 7.3		
25				255	1.8			480	2.8			705	⑥ 425 - 4.1 - 2.1		
30				260	1.5			485	2.8			710	⑦ 415 - 4.2 - 6.6		
35				265	1.1			490	2.7			715	⑧ 405 - 3.7 - 6.6		
40				270	.9			495	2.5			720	⑨ 395 - 3.7 - 6.3		
45				275	1.4			500	2.6			725	⑩ 385 - 3.7 - 5.6		
50				280	2.1			505	2.7			730			
55				285	2.0			510	2.9			735			
60				290	2.2			515	2.6 TO 520			740			
65				295	1.4			520				745			
70				300	1.1			525				750			
75				305	1.0			530				755			
80				310	.9			535				760	P1-60		
85				315	.7			540				765	D2 170		
90				320	.9			545				770			
95				325	.9			550				775			
100				330	1.3			555				780			
105				335	1.0			560				785			
110				340	1.2			565				790			
115				345	1.1			570				795			
120				350	1.0			575				800			
125				355	.6			580				805			
130				360	.3			585				810			
135				365	2.4			590				815			
140				370	2.4			595				820			
145				375	2.4			600				825			
150				380	2.5			605				830			
155				385	2.7			610				835			
160				390	2.6			615				840			
165				395	2.6			620				845			
170				400	2.6			625				850			
175				405	2.7			630				855			
180				410	2.7			635				860			
185				415	2.8			640				865			
190				420	2.8			645				870			
195				425	2.8			650				875			
200	= 7			430	2.8			655				880			
205	= 8			435	2.8			660				885			
210	= 5			440	2.8			665				890			
215	= 6			445	2.6			670				895			
220	= 7			450	2.6			675				900			
225	= 6														

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00010		SJ			2	24	30N	10W	247374	4076564*	292		
SJ 00024		SJ	2	4	2	23	30N	10W	246083	4076508*	305		
SJ 00050		SJ	2	3	1	02	30N	10W	245187	4081290*	520	306	214
SJ 00051		SJ	2	4	2	23	30N	10W	246083	4076508*	305		
SJ 00197		SJ		2	4	23	30N	10W	245968	4076007*	975	500	475
SJ 00523		SJ		4	4	08	30N	10W	241292	4078946*	160	120	40
SJ 00589		SJ	1	1	1	08	30N	10W	240077	4080236*	175	150	25
SJ 00774		SJ	1	2	1	08	30N	10W	240477	4080231*	195	160	35
SJ 01059		SJ	4	2	1	34	30N	10W	243585	4073570*	115	75	40
SJ 01102		SJ		4	2	08	30N	10W	241350	4079731*	200	159	41
SJ 01116		SJ		1	2	33	30N	10W	242296	4073713*	105	45	60
SJ 01182		SJ	3	3	1	34	30N	10W	242974	4073183*	235	125	110
SJ 01193		SJ		2	2	08	30N	10W	241378	4080123*	100	70	30
SJ 01362		SJ	3	3	1	20	30N	10W	239888	4076436*	238	190	48
SJ 01527		SJ		2	2	08	30N	10W	241378	4080123*	120	60	60
SJ 02102		SJ	4	3	1	08	30N	10W	240254	4079630*	190	90	100
SJ 02316		SJ		3	1	08	30N	10W	240155	4079731*	210	98	112
SJ 02772		SJ	2	2	4	08	30N	10W	241420	4079438*	200	160	40
SJ 02782		SJ	4	4	1	20	30N	10W	240482	4076452*	250		
SJ 02797		SJ	1	4	2	20	30N	10W	241073	4076685*	70		
SJ 02808		SJ	4	3	2	08	30N	10W	241050	4079630*	165	105	60
SJ 02998		SJ	1	3	3	08	30N	10W	240009	4079019*	260	117	143
SJ 03113		SJ	4	1	4	05	30N	10W	241126	4080827*	42	30	12
SJ 03230		SJ	1	2	1	03	30N	10W	243782	4081752*	120	70	50
SJ 03442		SJ	1	4	1	20	30N	10W	240282	4076652*	200		
SJ 03460		SJ	2	3	1	02	30N	10W	245187	4081290*	520	500	20

***UTM location was derived from PLSS - see Help**

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 04020 POD1		SJ	1	2	03	30N	10W		244319	4081753	325		

Average Depth to Water: **156 feet**

Minimum Depth: **30 feet**

Maximum Depth: **500 feet**

Record Count: 27

PLSS Search:

Township: 30N **Range:** 10W

From: Smith, Cory, EMNRD
To: Long, Thomas; Fields, Vanessa, EMNRD; l1thomas@blm.gov
Cc: Stone, Brian
Subject: RE: Below Grade Tank Closure Notification - Potter Compressor Station Tank #5
Date: Monday, November 06, 2017 7:01:35 AM

Good Morning Tom,

Any status update on sampling today?

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas [mailto:tjlong@eprod.com]
Sent: Wednesday, November 1, 2017 2:06 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; l1thomas@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: Below Grade Tank Closure Notification - Potter Compressor Station Tank #5

Cory,/Whitney,

This got rescheduled to Monday, November 6, 2017. I will keep you informed when we may sample.

Tom Long
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Long, Thomas
Sent: Wednesday, November 01, 2017 12:31 PM
To: 'Smith, Cory, EMNRD'; Fields, Vanessa, EMNRD; l1thomas@blm.gov
Cc: Stone, Brian
Subject: RE: Below Grade Tank Closure Notification - Potter Compressor Station Tank #5

Cory/Whitney,

This email is to notify you that Enterprise has scheduled the remediation of the BGT release at Potter Compressor Station to begin tomorrow. We finally completed the SPPCC upgrade and removed all

the equipment in the area for the former BGT. I will keep you informed as to when soil sample collection may be scheduled. If you have any questions, please all or email.

Sincerely,

Tom Long
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Tuesday, August 22, 2017 7:08 AM
To: Long, Thomas; Fields, Vanessa, EMNRD; l1thomas@blm.gov
Cc: Stone, Brian
Subject: RE: Below Grade Tank Closure Notification - Potter Compressor Station Tank #5

Tom,

Thanks for the notification. Please let us know when its planned on starting.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas [mailto:tjlong@eprod.com]
Sent: Monday, August 21, 2017 2:25 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; l1thomas@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: Below Grade Tank Closure Notification - Potter Compressor Station Tank #5

Cory/Whitney,

This email is to notify you that Enterprise discovered a release below and around the BGT at Potter Compressor Station. We will begin the remediation activities after the 1,000 BBL and 500 BBL condensate tanks are removed and re-set to the east, so that facility operations are not disrupted. I will keep you informed as to when the remediation activities will begin. If you have any questions, please call or email.

Sincerely,

Tom Long
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Long, Thomas
Sent: Thursday, August 17, 2017 2:35 PM
To: 'Smith, Cory, EMNRD'
Cc: Fields, Vanessa, EMNRD; Stone, Brian
Subject: RE: Below Grade Tank Closure Notification - Potter Compressor Station Tank #5

Cory,

It is estimated that we will be ready to sample around 11:00 a.m. on Monday. If you have any questions, please call or email.

Sincerely,

Tom Long
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Thursday, August 17, 2017 8:43 AM
To: Long, Thomas
Cc: Fields, Vanessa, EMNRD
Subject: RE: Below Grade Tank Closure Notification - Potter Compressor Station Tank #5

Tom,

Thanks for the notification do you know about what time the BGT is to be pulled?

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas [mailto:tjlong@eprod.com]
Sent: Thursday, August 17, 2017 8:24 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; l1thomas@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>; Seale, Runell <RSeale@eprod.com>
Subject: Below Grade Tank Closure Notification - Potter Compressor Station Tank #5

Cory/Vanessa/Whitney,

This email is to notify you that Enterprise has scheduled the closure and removal of the Below Grade Tank #5 at Potter Compressor Station for Monday, August 21, 2017. I have attached the previously submitted and approved BGT registration package as a reference. We will be collecting a soil sample from beneath the bottom of the tank and it will be analyzed for contaminants of concern identified in the attached BGT registration package. If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

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:
Potter Compressor Station

3. Location of Material (Street Address, City, State or ULSTR):
UL A Section 19 Township 30 North Range 10 West; 36.803020, -107.921590, San Juan County, NM

4. Source and Description of Waste:
Source: Soil/Water/Sludge from cleaning the 1,000 bbl condensate tank.
Description: Exempt material associated with cleaning the 1,000 bbl condensate tank.
Estimated Volume 50 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul)_____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long Thomas Long, representative or authorized agent for Enterprise Products Operating 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 Thomas Long 8-28-17, representative for Enterprise Products Operating authorize IEI, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I,_____, representative for IEI, Inc. do hereby certify that 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: Triple S Trucking

OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: JFJ Landfarm/Industrial Ecosystems, Inc. * **Permit #: NM 01-0010B**
Address of Facility: **#49 CR 2150 Aztec, New Mexico**

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: _____ TITLE: _____ DATE: _____
SIGNATURE: _____ TELEPHONE NO.: _____
Surface Waste Management Facility Authorized Agent 505-632-1782

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

August 25, 2017

Shawna Chubbuck
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-7535
FAX

RE: Potter CS OrderNo.: 1708C11

Dear Shawna Chubbuck:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/22/2017 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 qualifiers 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
Client Sample ID: SB-2 @ 3'
Project: Potter CS
Collection Date: 8/21/2017 11:40:00 AM
Lab ID: 1708C11-001 **Matrix:** SOIL **Received Date:** 8/22/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/22/2017 12:10:50 PM	33482
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/22/2017 12:10:50 PM	33482
Surr: DNOP	102	70-130		%Rec	1	8/22/2017 12:10:50 PM	33482
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	8/22/2017 10:19:44 AM	33464
Surr: BFB	87.7	54-150		%Rec	1	8/22/2017 10:19:44 AM	33464
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	8/22/2017 10:19:44 AM	33464
Toluene	ND	0.036		mg/Kg	1	8/22/2017 10:19:44 AM	33464
Ethylbenzene	ND	0.036		mg/Kg	1	8/22/2017 10:19:44 AM	33464
Xylenes, Total	ND	0.071		mg/Kg	1	8/22/2017 10:19:44 AM	33464
Surr: 4-Bromofluorobenzene	126	66.6-132		%Rec	1	8/22/2017 10:19:44 AM	33464

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: PH-2 @ 4'
Project: Potter CS
Collection Date: 8/21/2017 12:12:00 PM
Lab ID: 1708C11-002
Matrix: SOIL
Received Date: 8/22/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	42	9.7		mg/Kg	1	8/22/2017 12:35:40 PM	33482
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/22/2017 12:35:40 PM	33482
Surr: DNOP	109	70-130		%Rec	1	8/22/2017 12:35:40 PM	33482
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	8/22/2017 10:43:37 AM	33464
Surr: BFB	84.2	54-150		%Rec	5	8/22/2017 10:43:37 AM	33464
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.091		mg/Kg	5	8/22/2017 10:43:37 AM	33464
Toluene	ND	0.18		mg/Kg	5	8/22/2017 10:43:37 AM	33464
Ethylbenzene	ND	0.18		mg/Kg	5	8/22/2017 10:43:37 AM	33464
Xylenes, Total	ND	0.37		mg/Kg	5	8/22/2017 10:43:37 AM	33464
Surr: 4-Bromofluorobenzene	118	66.6-132		%Rec	5	8/22/2017 10:43:37 AM	33464

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: PH-3 @ 4'
Project: Potter CS
Collection Date: 8/21/2017 12:18:00 PM
Lab ID: 1708C11-003
Matrix: SOIL
Received Date: 8/22/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	14	9.5		mg/Kg	1	8/22/2017 1:00:38 PM	33482
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/22/2017 1:00:38 PM	33482
Surr: DNOP	106	70-130		%Rec	1	8/22/2017 1:00:38 PM	33482
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	8/22/2017 11:07:33 AM	33464
Surr: BFB	89.6	54-150		%Rec	1	8/22/2017 11:07:33 AM	33464
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	8/22/2017 11:07:33 AM	33464
Toluene	ND	0.037		mg/Kg	1	8/22/2017 11:07:33 AM	33464
Ethylbenzene	ND	0.037		mg/Kg	1	8/22/2017 11:07:33 AM	33464
Xylenes, Total	ND	0.074		mg/Kg	1	8/22/2017 11:07:33 AM	33464
Surr: 4-Bromofluorobenzene	121	66.6-132		%Rec	1	8/22/2017 11:07:33 AM	33464

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708C11**

25-Aug-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID **LCS-33482**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **33482**	RunNo: **45119**
Prep Date: **8/22/2017**	Analysis Date: **8/22/2017**	SeqNo: **1428873** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.0	73.2	114			
Surr: DNOP	4.7		5.000		93.9	70	130			

Sample ID **MB-33482**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **33482**	RunNo: **45119**
Prep Date: **8/22/2017**	Analysis Date: **8/22/2017**	SeqNo: **1428874** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708C11**

25-Aug-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID **MB-33464**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **33464**	RunNo: **45126**
Prep Date: **8/21/2017**	Analysis Date: **8/22/2017**	SeqNo: **1429028** 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	900		1000		89.8	54	150			

Sample ID **LCS-33464**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **33464**	RunNo: **45126**
Prep Date: **8/21/2017**	Analysis Date: **8/22/2017**	SeqNo: **1429029** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.3	76.4	125			
Surr: BFB	980		1000		98.4	54	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708C11**

25-Aug-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID **MB-33464**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **33464**	RunNo: **45126**
Prep Date: **8/21/2017**	Analysis Date: **8/22/2017**	SeqNo: **1429043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.3		1.000		127	66.6	132			

Sample ID **LCS-33464**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **33464**	RunNo: **45126**
Prep Date: **8/21/2017**	Analysis Date: **8/22/2017**	SeqNo: **1429044** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	109	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		131	66.6	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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: 1708C11 RcptNo: 1

Received By: Anne Thorne 8/22/2017 7:00:00 AM Anne Thorne

Completed By: Anne Thorne 8/22/2017 7:24:32 AM Anne Thorne

Reviewed By: DDS 8-22-17

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	1.0	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W. Broadway

Phone #: 505-325-7535

email or Fax#: Shawnia.Clubbuck@souldermiller.com

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

Accreditation: ☐ NELAP ☐ Other ____

☐ EDD (Type) ____

Turn-Around Time: ☐ Standard ☒ Rush ~~NEXT~~ Same DAY

Project Name: Potter CS

Project #: 512576O

Project Manager: Shawnia Clubbuck

Sampler: SM

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

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 # (At 08/22/17 MeoH Kit)	Preservative Type	HEAL No. 1708C11	BTEX + MTBE + TMBs (8021) ~~Soil~~	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)
8/21/17	11:40	Soil	SB-2 @ 3'	(2) 4oz	Cool	001	X		X													
	12:12		PH-2 @ 4'			002	X		X													
	12:18		PH-3 @ 4'			003	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/21/17	1710	Stephanie Tobin	Christine Walters	8/21/17	1710
8/21/17	1852	Christ Walt		08/22/17	0700

Remarks: cc: Tom Long at Enterprise

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

November 10, 2017

Stephanie Hinds
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-7535
FAX

RE: Potter OrderNo.: 1711462

Dear Stephanie Hinds:

Hall Environmental Analysis Laboratory received 10 sample(s) on 11/9/2017 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 qualifiers 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 **1711462**
Date Reported: **11/10/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-27
Project: Potter
Collection Date: 11/8/2017 1:25:00 PM
Lab ID: 1711462-001 **Matrix:** SOIL **Received Date:** 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/9/2017 10:55:44 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/9/2017 10:55:44 AM
Surr: DNOP	103	70-130		%Rec	1	11/9/2017 10:55:44 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	11/9/2017 9:56:09 AM
Surr: BFB	105	15-316		%Rec	1	11/9/2017 9:56:09 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.018		mg/Kg	1	11/9/2017 9:56:09 AM
Toluene	ND	0.037		mg/Kg	1	11/9/2017 9:56:09 AM
Ethylbenzene	ND	0.037		mg/Kg	1	11/9/2017 9:56:09 AM
Xylenes, Total	ND	0.073		mg/Kg	1	11/9/2017 9:56:09 AM
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	11/9/2017 9:56:09 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 10:41:02 AM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-28
Project: Potter
Collection Date: 11/8/2017 1:30:00 PM
Lab ID: 1711462-002 **Matrix:** SOIL **Received Date:** 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/9/2017 11:19:53 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/9/2017 11:19:53 AM
Surr: DNOP	104	70-130		%Rec	1	11/9/2017 11:19:53 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	11/9/2017 10:19:52 AM
Surr: BFB	107	15-316		%Rec	1	11/9/2017 10:19:52 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.018		mg/Kg	1	11/9/2017 10:19:52 AM
Toluene	ND	0.036		mg/Kg	1	11/9/2017 10:19:52 AM
Ethylbenzene	ND	0.036		mg/Kg	1	11/9/2017 10:19:52 AM
Xylenes, Total	ND	0.072		mg/Kg	1	11/9/2017 10:19:52 AM
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	11/9/2017 10:19:52 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 10:53:27 AM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-29
Project: Potter
Collection Date: 11/8/2017 1:34:00 PM
Lab ID: 1711462-003 **Matrix:** SOIL **Received Date:** 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/9/2017 11:44:12 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	11/9/2017 11:44:12 AM
Surr: DNOP	103	70-130		%Rec	1	11/9/2017 11:44:12 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	11/9/2017 10:43:34 AM
Surr: BFB	106	15-316		%Rec	1	11/9/2017 10:43:34 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.018		mg/Kg	1	11/9/2017 10:43:34 AM
Toluene	ND	0.036		mg/Kg	1	11/9/2017 10:43:34 AM
Ethylbenzene	ND	0.036		mg/Kg	1	11/9/2017 10:43:34 AM
Xylenes, Total	ND	0.073		mg/Kg	1	11/9/2017 10:43:34 AM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	11/9/2017 10:43:34 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 11:05:51 AM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-30
Project: Potter
Collection Date: 11/8/2017 1:40:00 PM
Lab ID: 1711462-004 **Matrix:** SOIL **Received Date:** 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	12	9.6		mg/Kg	1	11/9/2017 12:08:20 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/9/2017 12:08:20 PM
Surr: DNOP	106	70-130		%Rec	1	11/9/2017 12:08:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	11/9/2017 11:07:23 AM
Surr: BFB	107	15-316		%Rec	1	11/9/2017 11:07:23 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.020		mg/Kg	1	11/9/2017 11:07:23 AM
Toluene	ND	0.039		mg/Kg	1	11/9/2017 11:07:23 AM
Ethylbenzene	ND	0.039		mg/Kg	1	11/9/2017 11:07:23 AM
Xylenes, Total	ND	0.078		mg/Kg	1	11/9/2017 11:07:23 AM
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	11/9/2017 11:07:23 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 11:18:15 AM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-31
Project: Potter
Collection Date: 11/8/2017 1:45:00 PM
Lab ID: 1711462-005 **Matrix:** SOIL **Received Date:** 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	19	9.4		mg/Kg	1	11/9/2017 12:32:42 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/9/2017 12:32:42 PM
Surr: DNOP	107	70-130		%Rec	1	11/9/2017 12:32:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	4.1	3.5		mg/Kg	1	11/9/2017 11:31:13 AM
Surr: BFB	145	15-316		%Rec	1	11/9/2017 11:31:13 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.018		mg/Kg	1	11/9/2017 11:31:13 AM
Toluene	ND	0.035		mg/Kg	1	11/9/2017 11:31:13 AM
Ethylbenzene	ND	0.035		mg/Kg	1	11/9/2017 11:31:13 AM
Xylenes, Total	ND	0.070		mg/Kg	1	11/9/2017 11:31:13 AM
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	11/9/2017 11:31:13 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 11:30:40 AM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Potter
Lab ID: 1711462-006 **Matrix:** SOIL

Client Sample ID: S-32
Collection Date: 11/8/2017 1:52:00 PM
Received Date: 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	38	9.6		mg/Kg	1	11/9/2017 12:57:00 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/9/2017 12:57:00 PM
Surr: DNOP	106	70-130		%Rec	1	11/9/2017 12:57:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	66	18		mg/Kg	5	11/9/2017 12:42:48 PM
Surr: BFB	174	15-316		%Rec	5	11/9/2017 12:42:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.088		mg/Kg	5	11/9/2017 12:42:48 PM
Toluene	ND	0.18		mg/Kg	5	11/9/2017 12:42:48 PM
Ethylbenzene	0.23	0.18		mg/Kg	5	11/9/2017 12:42:48 PM
Xylenes, Total	3.6	0.35		mg/Kg	5	11/9/2017 12:42:48 PM
Surr: 4-Bromofluorobenzene	124	80-120	S	%Rec	5	11/9/2017 12:42:48 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 11:43:04 AM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-35
Project: Potter
Collection Date: 11/8/2017 3:05:00 PM
Lab ID: 1711462-007 **Matrix:** SOIL **Received Date:** 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	230	9.5		mg/Kg	1	11/9/2017 1:21:23 PM
Motor Oil Range Organics (MRO)	130	47		mg/Kg	1	11/9/2017 1:21:23 PM
Surr: DNOP	108	70-130		%Rec	1	11/9/2017 1:21:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	660	18		mg/Kg	5	11/9/2017 1:06:33 PM
Surr: BFB	905	15-316	S	%Rec	5	11/9/2017 1:06:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	0.11	0.092		mg/Kg	5	11/9/2017 1:06:33 PM
Toluene	1.2	0.18		mg/Kg	5	11/9/2017 1:06:33 PM
Ethylbenzene	4.2	0.18		mg/Kg	5	11/9/2017 1:06:33 PM
Xylenes, Total	50	3.7		mg/Kg	50	11/9/2017 5:27:42 PM
Surr: 4-Bromofluorobenzene	176	80-120	S	%Rec	5	11/9/2017 1:06:33 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 11:55:29 AM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Potter
Lab ID: 1711462-008 **Matrix:** SOIL

Client Sample ID: S-36
Collection Date: 11/8/2017 3:10:00 PM
Received Date: 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	14	10		mg/Kg	1	11/9/2017 1:45:52 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	11/9/2017 1:45:52 PM
Surr: DNOP	104	70-130		%Rec	1	11/9/2017 1:45:52 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	11/9/2017 1:30:19 PM
Surr: BFB	135	15-316		%Rec	5	11/9/2017 1:30:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.093		mg/Kg	5	11/9/2017 1:30:19 PM
Toluene	ND	0.19		mg/Kg	5	11/9/2017 1:30:19 PM
Ethylbenzene	ND	0.19		mg/Kg	5	11/9/2017 1:30:19 PM
Xylenes, Total	0.55	0.37		mg/Kg	5	11/9/2017 1:30:19 PM
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	5	11/9/2017 1:30:19 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 12:07:54 PM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Potter
Lab ID: 1711462-009 **Matrix:** SOIL

Client Sample ID: S-37
Collection Date: 11/8/2017 3:14:00 PM
Received Date: 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	270	9.6		mg/Kg	1	11/9/2017 2:10:33 PM
Motor Oil Range Organics (MRO)	160	48		mg/Kg	1	11/9/2017 2:10:33 PM
Surr: DNOP	112	70-130		%Rec	1	11/9/2017 2:10:33 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	280	20		mg/Kg	5	11/9/2017 11:55:05 AM
Surr: BFB	502	15-316	S	%Rec	5	11/9/2017 11:55:05 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.10		mg/Kg	5	11/9/2017 11:55:05 AM
Toluene	ND	0.20		mg/Kg	5	11/9/2017 11:55:05 AM
Ethylbenzene	1.3	0.20		mg/Kg	5	11/9/2017 11:55:05 AM
Xylenes, Total	15	0.40		mg/Kg	5	11/9/2017 11:55:05 AM
Surr: 4-Bromofluorobenzene	137	80-120	S	%Rec	5	11/9/2017 11:55:05 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 12:45:08 PM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Potter
Lab ID: 1711462-010 **Matrix:** SOIL

Client Sample ID: S-38
Collection Date: 11/8/2017 3:18:00 PM
Received Date: 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	1000	20		mg/Kg	2	11/9/2017 3:24:25 PM
Motor Oil Range Organics (MRO)	490	99		mg/Kg	2	11/9/2017 3:24:25 PM
Surr: DNOP	111	70-130		%Rec	2	11/9/2017 3:24:25 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3000	370		mg/Kg	100	11/9/2017 6:15:03 PM
Surr: BFB	255	15-316		%Rec	100	11/9/2017 6:15:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	0.95	0.092		mg/Kg	5	11/9/2017 12:19:02 PM
Toluene	6.7	0.18		mg/Kg	5	11/9/2017 12:19:02 PM
Ethylbenzene	16	0.18		mg/Kg	5	11/9/2017 12:19:02 PM
Xylenes, Total	190	7.4		mg/Kg	100	11/9/2017 6:15:03 PM
Surr: 4-Bromofluorobenzene	309	80-120	S	%Rec	5	11/9/2017 12:19:02 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/9/2017 12:57:32 PM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711462**

10-Nov-17

Client: Souder, Miller and Associates

Project: Potter

Sample ID	**MB-34913**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**34913**	RunNo:	**47011**					
Prep Date:	**11/9/2017**	Analysis Date:	**11/9/2017**	SeqNo:	**1500991**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-34913**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**34913**	RunNo:	**47011**					
Prep Date:	**11/9/2017**	Analysis Date:	**11/9/2017**	SeqNo:	**1500992**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.7	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711462**

10-Nov-17

Client: Souder, Miller and Associates

Project: Potter

Sample ID **LCS-34912**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**						
Client ID: **LCSS**	Batch ID: **34912**			RunNo: **47004**						
Prep Date: **11/9/2017**	Analysis Date: **11/9/2017**			SeqNo: **1499481**		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	97.0	73.2	114			
Surr: DNOP	4.7		5.000		93.8	70	130			

Sample ID **MB-34912**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**						
Client ID: **PBS**	Batch ID: **34912**			RunNo: **47004**						
Prep Date: **11/9/2017**	Analysis Date: **11/9/2017**			SeqNo: **1499482**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		100	70	130			

Sample ID **1711462-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**						
Client ID: **S-27**	Batch ID: **34912**			RunNo: **47004**						
Prep Date: **11/9/2017**	Analysis Date: **11/9/2017**			SeqNo: **1500408**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.7	48.54	2.146	96.0	55.8	122			
Surr: DNOP	5.0		4.854		103	70	130			

Sample ID **1711462-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**						
Client ID: **S-27**	Batch ID: **34912**			RunNo: **47004**						
Prep Date: **11/9/2017**	Analysis Date: **11/9/2017**			SeqNo: **1500409**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.3	46.51	2.146	91.9	55.8	122	8.17	20	
Surr: DNOP	4.6		4.651		98.3	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711462**

10-Nov-17

Client: Souder, Miller and Associates

Project: Potter

Sample ID **MB-34900**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **34900**	RunNo: **47012**
Prep Date: **11/8/2017**	Analysis Date: **11/9/2017**	SeqNo: **1500356** 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	1100		1000		108	15	316			

Sample ID **LCS-34900**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **34900**	RunNo: **47012**
Prep Date: **11/8/2017**	Analysis Date: **11/9/2017**	SeqNo: **1500357** 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	75.9	131			
Surr: BFB	1200		1000		117	15	316			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711462**

10-Nov-17

Client: Souder, Miller and Associates

Project: Potter

Sample ID **MB-34900**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **34900**	RunNo: **47012**
Prep Date: **11/8/2017**	Analysis Date: **11/9/2017**	SeqNo: **1500375** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
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 **LCS-34900**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **34900**	RunNo: **47012**
Prep Date: **11/8/2017**	Analysis Date: **11/9/2017**	SeqNo: **1500376** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	77.3	128			
Toluene	0.98	0.050	1.000	0	98.3	79.2	125			
Ethylbenzene	0.98	0.050	1.000	0	98.4	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	97.8	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		112	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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: 1711462 | RcptNo: 1

Received By: Anne Thorne 11/9/2017 7:00:00 AM Anne Thorne

Completed By: Anne Thorne 11/9/2017 7:33:19 AM Anne Thorne

Reviewed By: DDS 11/9/17

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	1.0	Good	Yes			

Chain-of-Custody Record

Client: Enterprise / SMA

Mailing Address: 401 W. Broadway
Farmington, NM 87401

Phone #: 505-325-7535

email or Fax#: Stephanie.hinds@sondermiller.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush Same day

Project Name: Potter

Project #: 5125760 BG69

Project Manager: Stephanie Hinds

Sampler: SM

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

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. 1711462	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 Chlorides				Air Bubbles (Y or N)
11/08/17	13:25	Soil	S-27	MeOH Kit 4oz	MeOH Cool	001	X		X									X				
	13:30		S-28			002	X		X									X				
	13:34		S-29			003	X		X									X				
	13:40		S-30			004	X		X									X				
	13:45		S-31			005	X		X									X				
	13:52		S-32			006	X		X									X				
	15:05		S-35			007	X		X									X				
	15:10		S-36			008	X		X									X				
	15:14		~~S-38~~ SAM S-37			009	X		X									X				
	15:18		S-38			010	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/8/17	1750	Stephanie Hinds		11/8/17	1750
11/8/17	1854			11/09/17	0700

Remarks:
Bill to Enterprise. Non AFE #N31693
CC: Tom Long

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

November 14, 2017

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

RE: Potter CS OrderNo.: 1711592

Dear Stephanie Hinds:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/10/2017 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 qualifiers 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 **1711592**
Date Reported: **11/14/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Potter CS
Lab ID: 1711592-001
Matrix: MEOH (SOIL)
Client Sample ID: S-40
Collection Date: 11/9/2017 9:43:00 AM
Received Date: 11/10/2017 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/10/2017 11:16:55 AM	34942
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	11	9.7		mg/Kg	1	11/10/2017 9:40:06 AM	34939
Motor Oil Range Organics (MRO)	52	49		mg/Kg	1	11/10/2017 9:40:06 AM	34939
Surr: DNOP	100	70-130		%Rec	1	11/10/2017 9:40:06 AM	34939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	11/10/2017 10:11:16 AM	34930
Surr: BFB	114	15-316		%Rec	1	11/10/2017 10:11:16 AM	34930
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	11/10/2017 10:11:16 AM	34930
Toluene	ND	0.034		mg/Kg	1	11/10/2017 10:11:16 AM	34930
Ethylbenzene	ND	0.034		mg/Kg	1	11/10/2017 10:11:16 AM	34930
Xylenes, Total	0.11	0.067		mg/Kg	1	11/10/2017 10:11:16 AM	34930
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	11/10/2017 10:11:16 AM	34930

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Potter CS
Lab ID: 1711592-002
Matrix: MEOH (SOIL)
Client Sample ID: S-41
Collection Date: 11/9/2017 9:51:00 AM
Received Date: 11/10/2017 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/10/2017 11:29:19 AM	34942
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/10/2017 10:02:00 AM	34939
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/10/2017 10:02:00 AM	34939
Surr: DNOP	99.7	70-130		%Rec	1	11/10/2017 10:02:00 AM	34939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	11/10/2017 10:35:07 AM	34930
Surr: BFB	112	15-316		%Rec	1	11/10/2017 10:35:07 AM	34930
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.021		mg/Kg	1	11/10/2017 10:35:07 AM	34930
Toluene	ND	0.043		mg/Kg	1	11/10/2017 10:35:07 AM	34930
Ethylbenzene	ND	0.043		mg/Kg	1	11/10/2017 10:35:07 AM	34930
Xylenes, Total	ND	0.085		mg/Kg	1	11/10/2017 10:35:07 AM	34930
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	11/10/2017 10:35:07 AM	34930

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-42
Project: Potter CS
Collection Date: 11/9/2017 9:57:00 AM
Lab ID: 1711592-003
Matrix: MEOH (SOIL)
Received Date: 11/10/2017 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/10/2017 11:41:44 AM	34942
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	13	9.7		mg/Kg	1	11/10/2017 10:24:07 AM	34939
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/10/2017 10:24:07 AM	34939
Surr: DNOP	97.6	70-130		%Rec	1	11/10/2017 10:24:07 AM	34939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	11/10/2017 10:59:04 AM	34930
Surr: BFB	146	15-316		%Rec	1	11/10/2017 10:59:04 AM	34930
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	11/10/2017 10:59:04 AM	34930
Toluene	ND	0.041		mg/Kg	1	11/10/2017 10:59:04 AM	34930
Ethylbenzene	ND	0.041		mg/Kg	1	11/10/2017 10:59:04 AM	34930
Xylenes, Total	ND	0.081		mg/Kg	1	11/10/2017 10:59:04 AM	34930
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	11/10/2017 10:59:04 AM	34930

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Potter CS
Lab ID: 1711592-004
Matrix: MEOH (SOIL)
Client Sample ID: S-43
Collection Date: 11/9/2017 10:05:00 AM
Received Date: 11/10/2017 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/10/2017 11:54:08 AM	34942
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	310	9.9		mg/Kg	1	11/10/2017 10:46:10 AM	34939
Motor Oil Range Organics (MRO)	170	49		mg/Kg	1	11/10/2017 10:46:10 AM	34939
Surr: DNOP	108	70-130		%Rec	1	11/10/2017 10:46:10 AM	34939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1100	39		mg/Kg	10	11/10/2017 11:22:55 AM	34930
Surr: BFB	716	15-316	S	%Rec	10	11/10/2017 11:22:55 AM	34930
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.25	0.19		mg/Kg	10	11/10/2017 11:22:55 AM	34930
Toluene	0.33	0.19		mg/Kg	10	11/10/2017 11:22:55 AM	34930
Ethylbenzene	5.9	0.39		mg/Kg	10	11/10/2017 11:22:55 AM	34930
Xylenes, Total	62	0.77		mg/Kg	10	11/10/2017 11:22:55 AM	34930
Surr: 4-Bromofluorobenzene	156	80-120	S	%Rec	10	11/10/2017 11:22:55 AM	34930

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-44
Project: Potter CS
Collection Date: 11/9/2017 10:12:00 AM
Lab ID: 1711592-005
Matrix: MEOH (SOIL)
Received Date: 11/10/2017 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/10/2017 12:06:33 PM	34942
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/10/2017 11:30:19 AM	34939
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/10/2017 11:30:19 AM	34939
Surr: DNOP	99.3	70-130		%Rec	1	11/10/2017 11:30:19 AM	34939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	11/10/2017 11:46:42 AM	34930
Surr: BFB	144	15-316		%Rec	1	11/10/2017 11:46:42 AM	34930
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	11/10/2017 11:46:42 AM	34930
Toluene	ND	0.040		mg/Kg	1	11/10/2017 11:46:42 AM	34930
Ethylbenzene	ND	0.040		mg/Kg	1	11/10/2017 11:46:42 AM	34930
Xylenes, Total	ND	0.081		mg/Kg	1	11/10/2017 11:46:42 AM	34930
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	11/10/2017 11:46:42 AM	34930

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711592**

14-Nov-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID	**MB-34942**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**34942**		RunNo:	**47043**				
Prep Date:	**11/10/2017**	Analysis Date:	**11/10/2017**		SeqNo:	**1501826**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-34942**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**34942**		RunNo:	**47043**				
Prep Date:	**11/10/2017**	Analysis Date:	**11/10/2017**		SeqNo:	**1501827**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711592**

14-Nov-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID **LCS-34939**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **34939**			RunNo: **47029**					
Prep Date: **11/10/2017**	Analysis Date: **11/10/2017**			SeqNo: **1500662**		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	98.7	73.2	114			
Surr: DNOP	4.8		5.000		96.0	70	130			

Sample ID **MB-34939**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **34939**			RunNo: **47029**					
Prep Date: **11/10/2017**	Analysis Date: **11/10/2017**			SeqNo: **1500664**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	70	130			

Sample ID **LCS-34925**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **34925**			RunNo: **47029**					
Prep Date: **11/9/2017**	Analysis Date: **11/10/2017**			SeqNo: **1502323**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.6	70	130			

Sample ID **MB-34925**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **34925**			RunNo: **47029**					
Prep Date: **11/9/2017**	Analysis Date: **11/10/2017**			SeqNo: **1502324**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		99.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711592**

14-Nov-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID **MB-34930**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **34930**	RunNo: **47044**
Prep Date: **11/9/2017**	Analysis Date: **11/10/2017**	SeqNo: **1501473** 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	1100		1000		108	15	316			

Sample ID **LCS-34930**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **34930**	RunNo: **47044**
Prep Date: **11/9/2017**	Analysis Date: **11/10/2017**	SeqNo: **1501474** 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	105	75.9	131			
Surr: BFB	1200		1000		118	15	316			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711592**

14-Nov-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID **MB-34930**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **34930**	RunNo: **47044**
Prep Date: **11/9/2017**	Analysis Date: **11/10/2017**	SeqNo: **1501482** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
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 **LCS-34930**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **34930**	RunNo: **47044**
Prep Date: **11/9/2017**	Analysis Date: **11/10/2017**	SeqNo: **1501483** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.8	77.3	128			
Toluene	1.0	0.050	1.000	0	101	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	101	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	98.9	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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: 1711592 | RcptNo: 1

Received By: Richie Eriacho 11/10/2017 7:30:00 AM

Completed By: Erin Melendrez 11/10/2017 8:18:05 AM

Reviewed By: 11/10/17

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	3.9	Good	Yes			

Chain-of-Custody Record

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

Client: SMA

Mailing Address: 401 W. Broadway
Farmington, NM 87401

Phone #: 505-325-7535

email or Fax#: Stephanie.hinds@sodermiller.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush Same day

Project Name: Potter CS

Project #: 5125760 BG69

Project Manager: Stephanie Hinds

Sampler: SH

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.8 + 0.1 = 3.9

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1711592	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)	300.1 Chlorides				Air Bubbles (Y or N)
11/09/17	9:43	Soil	S-40	MeOH Kit 4oz	MeOH 100%	-001	X		X									X				
	9:51		S-41			-002	X		X									X				
	9:57		S-42			-003	X		X									X				
	10:05		S-43			-004	X		X									X				
↓	10:12	↓	S-44	↓	↓	-005	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/9/17	1510	Stephanie Hinds	Christa Walters	11/9/17	1510
11/9/17	2045	Christa Walters		11/10/17	0730

Remarks:
Bill to Enterprise #N31693
cc Tom Long

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

November 14, 2017

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

RE: Potter CS OrderNo.: 1711643

Dear Stephanie Hinds:

Hall Environmental Analysis Laboratory received 3 sample(s) on 11/11/2017 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 qualifiers 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 **1711643**
Date Reported: **11/14/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-47
Project: Potter CS
Collection Date: 11/10/2017 12:15:00 PM
Lab ID: 1711643-001 **Matrix:** MEOH (SOIL) **Received Date:** 11/11/2017 10:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **MAB**
Diesel Range Organics (DRO)	220	9.3		mg/Kg	1	11/13/2017 11:11:52 AM
Motor Oil Range Organics (MRO)	140	47		mg/Kg	1	11/13/2017 11:11:52 AM
Surr: DNOP	105	70-130		%Rec	1	11/13/2017 11:11:52 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	270	20		mg/Kg	5	11/13/2017 10:13:52 AM
Surr: BFB	557	15-316	S	%Rec	5	11/13/2017 10:13:52 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.10		mg/Kg	5	11/13/2017 10:13:52 AM
Toluene	ND	0.20		mg/Kg	5	11/13/2017 10:13:52 AM
Ethylbenzene	0.80	0.20		mg/Kg	5	11/13/2017 10:13:52 AM
Xylenes, Total	7.8	0.40		mg/Kg	5	11/13/2017 10:13:52 AM
Surr: 4-Bromofluorobenzene	144	80-120	S	%Rec	5	11/13/2017 10:13:52 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/13/2017 12:28:24 PM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-48
Project: Potter CS
Collection Date: 11/10/2017 1:25:00 PM
Lab ID: 1711643-002
Matrix: MEOH (SOIL)
Received Date: 11/11/2017 10:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **MAB**
Diesel Range Organics (DRO)	69	9.9		mg/Kg	1	11/13/2017 11:33:56 AM
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	11/13/2017 11:33:56 AM
Surr: DNOP	104	70-130		%Rec	1	11/13/2017 11:33:56 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	45	21		mg/Kg	5	11/13/2017 10:37:43 AM
Surr: BFB	196	15-316		%Rec	5	11/13/2017 10:37:43 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.11		mg/Kg	5	11/13/2017 10:37:43 AM
Toluene	ND	0.21		mg/Kg	5	11/13/2017 10:37:43 AM
Ethylbenzene	ND	0.21		mg/Kg	5	11/13/2017 10:37:43 AM
Xylenes, Total	0.71	0.42		mg/Kg	5	11/13/2017 10:37:43 AM
Surr: 4-Bromofluorobenzene	123	80-120	S	%Rec	5	11/13/2017 10:37:43 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/13/2017 12:40:48 PM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: S-49
Project: Potter CS
Collection Date: 11/10/2017 2:22:00 PM
Lab ID: 1711643-003
Matrix: MEOH (SOIL)
Received Date: 11/11/2017 10:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **MAB**
Diesel Range Organics (DRO)	140	9.3		mg/Kg	1	11/13/2017 11:56:04 AM
Motor Oil Range Organics (MRO)	130	46		mg/Kg	1	11/13/2017 11:56:04 AM
Surr: DNOP	107	70-130		%Rec	1	11/13/2017 11:56:04 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	180	19		mg/Kg	5	11/13/2017 11:01:31 AM
Surr: BFB	378	15-316	S	%Rec	5	11/13/2017 11:01:31 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.097		mg/Kg	5	11/13/2017 11:01:31 AM
Toluene	ND	0.19		mg/Kg	5	11/13/2017 11:01:31 AM
Ethylbenzene	0.46	0.19		mg/Kg	5	11/13/2017 11:01:31 AM
Xylenes, Total	3.8	0.39		mg/Kg	5	11/13/2017 11:01:31 AM
Surr: 4-Bromofluorobenzene	132	80-120	S	%Rec	5	11/13/2017 11:01:31 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	30		mg/Kg	20	11/13/2017 12:53:13 PM

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711643**

14-Nov-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID	**MB-34962**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**34962**	RunNo:	**47079**					
Prep Date:	**11/13/2017**	Analysis Date:	**11/13/2017**	SeqNo:	**1503057**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-34962**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**34962**	RunNo:	**47079**					
Prep Date:	**11/13/2017**	Analysis Date:	**11/13/2017**	SeqNo:	**1503058**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711643**

14-Nov-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID **MB-34954**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **34954**	RunNo: **47072**
Prep Date: **11/13/2017**	Analysis Date: **11/13/2017**	SeqNo: **1501804** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		98.3	70	130			

Sample ID **LCS-34954**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **34954**	RunNo: **47072**
Prep Date: **11/13/2017**	Analysis Date: **11/13/2017**	SeqNo: **1501812** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.6	73.2	114			
Surr: DNOP	4.6		5.000		92.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711643**

14-Nov-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **SG47078**	RunNo: **47078**
Prep Date:	Analysis Date: **11/13/2017**	SeqNo: **1502245** 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	1100		1000		115	15	316			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **SG47078**	RunNo: **47078**
Prep Date:	Analysis Date: **11/13/2017**	SeqNo: **1502246** 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	75.9	131			
Surr: BFB	1300		1000		126	15	316			

Sample ID **1711643-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-47**	Batch ID: **SG47078**	RunNo: **47078**
Prep Date:	Analysis Date: **11/13/2017**	SeqNo: **1502247** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	380	20	100.0	274.6	100	77.8	128			
Surr: BFB	22000		4000		545	15	316			S

Sample ID **1711643-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-47**	Batch ID: **SG47078**	RunNo: **47078**
Prep Date:	Analysis Date: **11/13/2017**	SeqNo: **1502248** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	370	20	100.0	274.6	91.0	77.8	128	2.56	20	
Surr: BFB	21000		4000		536	15	316	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1711643**

14-Nov-17

Client: Souder, Miller and Associates

Project: Potter CS

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **SB47078**	RunNo: **47078**
Prep Date:	Analysis Date: **11/13/2017**	SeqNo: **1502264** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **SB47078**	RunNo: **47078**
Prep Date:	Analysis Date: **11/13/2017**	SeqNo: **1502265** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	99.7	77.3	128			
Toluene	0.99	0.050	1.000	0	98.8	79.2	125			
Ethylbenzene	0.98	0.050	1.000	0	98.4	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	98.1	81.6	129			
Surr: 4-Bromofluorobenzene	1.2		1.000		118	80	120			

Sample ID **1711643-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-48**	Batch ID: **SB47078**	RunNo: **47078**
Prep Date:	Analysis Date: **11/13/2017**	SeqNo: **1502266** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.1	0.11	4.205	0	97.5	80.9	132			
Toluene	4.1	0.21	4.205	0	98.4	79.8	136			
Ethylbenzene	4.2	0.21	4.205	0	99.9	79.4	140			
Xylenes, Total	13	0.42	12.62	0.7080	96.7	78.5	142			
Surr: 4-Bromofluorobenzene	5.0		4.205		120	80	120			

Sample ID **1711643-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-48**	Batch ID: **SB47078**	RunNo: **47078**
Prep Date:	Analysis Date: **11/13/2017**	SeqNo: **1502267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.2	0.11	4.205	0	101	80.9	132	3.27	20	
Toluene	4.2	0.21	4.205	0	98.9	79.8	136	0.458	20	
Ethylbenzene	4.2	0.21	4.205	0	101	79.4	140	0.975	20	
Xylenes, Total	13	0.42	12.62	0.7080	97.0	78.5	142	0.349	20	
Surr: 4-Bromofluorobenzene	5.0		4.205		119	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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: **1711643** RcptNo: **1**

Received By: **Anne Thorne** **11/11/2017 10:45:00 AM** Anne Thorne

Completed By: **Ashley Gallegos** **11/13/2017 8:25:09 AM** AG

Reviewed By: DDS 11/13/17

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	4.7	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: SMA	Turn-Around Time: ☐ Standard ☒ Rush same day
	Project Name: Potter CS
Mailing Address: 401 W Broadway Farmington, NM 87401	Project #:
Phone #: 505-325-7535	
email or Fax#: Stephanie.Hinds@soudermiller.com	Project Manager: Stephanie Hinds
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)	Sampler: SH
Accreditation ☐ NELAP ☐ Other	On Ice: ☒ Yes ☐ No
☐ EDD (Type)	Sample Temperature: 4.7

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1711643	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)	300.1 / CA lorfate				Air Bubbles (Y or N)
12:15	11/10/17	Soil	S-47	MeOH+K 4oz	MeOH cool	-001	X		X									X				
13:25	11/10/17	↓	S-48	↓	↓	-002	X		X									X				
14:22	11/10/17	↓	S-49	↓	↓	-003	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
11/10/17	1906	Stephanie Hinds		11/10/17	1906	Bill to Enterprise, N31693
11/10/17	1937			11/11/17	1045	cc: Tom Long

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.