



**Jason Michelson**  
Project Manager

**Chevron Environmental  
Management Company**  
1500 Louisiana Street, #38116  
Houston, Texas 77002  
Work: 832-854-5601  
Cell: 281-660-8564  
jmicelson@chevron.com

August 26, 2019

**S3FO3-190828-C-1410**

New Mexico Oil Conservation Division, District II  
811 S. First St  
Artesia, NM 88210

**Re: South Culebra Bluff 5B to Candelario 4" Polyline Release  
Site Status Letter  
NMOCD Case No. 2RP-4737  
Eddy County, New Mexico**

Dear whom it concerns,

Please find enclosed for your files, copies of the following report:

- South Culebra Bluff 5B to Candelario 4' Polyline Release – August 15, 2019 Site Status Letter
- C-141 Site Assessment/Characterization and Remediation Plan Form

The Site Status Letter was prepared by Arcadis U.S., Inc. (Arcadis) on behalf of Chevron Environmental Management Company (CEMC). CEMC has prepared the C-141 Site Assessment/Characterization and Remediation Plan forms a Report to summarize the initial cleanup activities and follow up activities from the South Culebra Bluff 5B to Candelario 4' Polyline Release. CEMC is requesting NMOCD reviewal and comments on the previously submitted documents, respectfully. The C-141 form has been completed based on the NEPAssist database and information provided in previous documents. Please note field data, boring or excavation logs, and photographs including date and GIS information are not available. The C-141 form is included as Attachment 1.

Please do not hesitate to call Rebecca Andresen with Arcadis at 206-726-4717 or myself at 832-854-5601, should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Michelson".

Jason Michelson

Encl. South Culebra Bluff 5B to Candelario 4' Polyline Release - Site Status Letter  
C-141 Site Assessment/Characterization and Remediation Plan Form  
South Culebra Bluff 5B to Candelario 4' Polyline Release Form C-141

cc.: Brett Krehbiel, Arcadis

Mr. Rob Hamlet  
New Mexico Oil Conservation Division - District II  
Environmental Specialist  
811 S. First St.  
Artesia, NM 88210

Arcadis U.S., Inc.  
630 Plaza Drive  
Suite 100  
Highlands Ranch  
Colorado 80129  
Tel 720 344 3500  
Fax 720 344 3535  
www.arcadis.com

Subject:

**Site Status Letter**

South Culebra Bluff 5B to Candelario 4" Polyline Release  
NMOCD Case No. 2RP-2437  
Eddy County, New Mexico

ENVIRONMENTAL

Date:

August 27, 2019

Dear Mr. Hamlet:

Contact:

Rebecca Andresen

On behalf of Chevron Environmental Management Company (CEMC), Arcadis U.S., Inc. (Arcadis) prepared this Site Status Letter (Letter) for the South Culebra Bluff 5B to Candelario 4" Polyline Release (Site), located in Eddy County, New Mexico. The release was from a polyline running between South Culebra Bluff 5B and Candelario 24 #1 SWD Battery. Rockcliff Operating New Mexico LLC (Rockcliff), the previous owner of these wells, notified New Mexico Oil Conservation District (NMOCD), National Response Center, and the New Mexico Environmental Department of the release on April 30, 2018.

Phone:

206-726-4717

Email:

Rebecca.Andresen@arcadis.com

Our ref:

30006594

The purpose of the Report is to summarize initial cleanup activities and follow up actions from the release on April 26, 2018, and to request NMOCD review and comment on previously submitted documents. The C-141 form has been completed based on the NEPAassist database and information provided in previous documents. The Site Assessment/Characterization and Remediation Plan C-141 forms can be found as Attachment 1.

## **SITE DESCRIPTION AND BACKGROUND**

The Site is located approximately 1.5 miles from Loving in Unit C, Section 24, Township 23S, Range 28E, Eddy County, New Mexico. The spill area is associated with the SCB 5B to Candelario 4" Polyline 2. The release site is located approximately 0.2 miles from the Pecos River, with an elevation of approximately 2951 feet above sea level. Depth to groundwater is approximately 17 feet at the Site.

File information indicates that on April 26, 2018, a third party ran over the 4" polyline that transfers produced water from SCB #5B to the Candelario SWD #1 disposal well, which caused a failure in the line. The landowner, Mosaic Company (Mosaic), used clamps to pinch the polyline on both sides of the damaged area, but the clamps became disengaged over the weekend, causing a further release. Upon determining the ownership of the line, Mosaic notified Rockcliff on April 30, 2018.

The release ran from the polyline across Fisherman's Lane and split into two individual paths. One path flowed over the edge of the ravine to the northeast, briefly diverging and then merging before entering the river. The other path flowed down the south side of the road, downhill towards the low water crossing, eventually pooling between the forms of a currently active county roadworks project and spreading to the north where the majority of the release pooled.

According to the initial C-141 Form dated April 26, 2018, the release was approximately 720 bbls of produced water and approximately 7.2 bbls of crude oil (Attachment 2).

### **INITIAL RELEASE RESPONSE ACTIVITIES**

According to the available file information, Souder Miller and Associates (SMA), on behalf of Rockcliff, mobilized to the emergency response location to perform initial action. Talon LPE was contacted to place booms in the river to provide containment around the two points of entry as well as downstream (three total).

SMA worked with onsite teams to remove impacted material near the northern bank of the river and collected soil confirmation samples for laboratory analysis. Surface water samples were also collected for laboratory analysis (SMA, July 2018).

The Bureau of Land Management (BLM), the Army Corps of Engineers, the Interstate Stream Commission, and the New Mexico Department of Fish and Game visited the site to monitor first response efforts during April 30, 2018.

Between May 1 through 7, 2018, SMA monitored the removal of free-standing fluid and delineation of the release. Additional surface water samples were collected and SMA completed boom and berm inspections and a biological survey. No evidence of impacted wildlife was observed (SMA, July 2018). Additional soil samples were also collected for laboratory analysis.

Road improvements along Fisherman's Lane were ongoing at the time of the release. According to file information (SMA, July 2018), the area surrounding the road was excavated and backfilled with clean material for the safety of the public and the construction company onsite. On May 15, 2018 SMA met with Rockcliff, BLM, and Sedona for a status update. While on site, BLM gave verbal approval to pour concrete within the forms and continue road construction. Rockcliff obtained written correspondence from both the BLM and NMOCD stating they were in agreement with the county road construction project to continue work and concrete pouring activities.

Due to the varying geology of the area, a background sample was taken for each NRCS soil type represented in the release area in addition to the background samples collected relative to each group of samples.

These release response activities were described in the SMA Remediation Report dated July 4, 2018. This report included a proposed remediation plan involving hydro excavation and/or excavation of

remaining impacts. The work plan was conditionally approved by the BLM in email correspondence dated July 11, 2018. The SMA, July 2018 report can be located as Attachment 3.

## **JULY - AUGUST INVESTIGATIONS**

In July 2018, SMA oversaw delineation and excavation efforts of the area surrounding the source. Soil samples were collected, and, after verbal approval from the BLM, the excavation was backfilled with clean material to restore the road and surrounding area to its previous contours (SMA, September 2018).

According to file information, SMA completed the hydro excavation as per the approved work plan in August 2018. SMA personnel and their contractors placed 50 feet of absorbent booms and re-established berms with clean soil around each work area ("cell") to prevent runoff into the river. A vacuum truck was placed at the lowest lying area of each boomed cell collecting fluid during hydro-excavating activities.

SMA treated a total of five cells with the hydro excavation and collected composite bedrock samples from each cell after hydro-excavation activities were complete. Due to the varying geology in the area, SMA compared each sample result to its associated background sample (SMA, September 2018). Most of the field samples collected on August 23 and August 24, 2018 after hydro excavation showed a decrease in chloride concentration since the initial action.

Chloride concentrations in three of the cells showed concentrations that are only slightly elevated from background in the area and the natural chloride concentration of the Pecos River. Chloride concentrations in one of the cells were above background but were 42% to 62% lower than the refusal samples collected prior to the hydro excavation. The chloride concentration for the fifth cell was elevated but was within the range of background for that soil type (SMA, September 2018). The SMA September 2018 can be located as Attachment 4.



## CLOSING

SMA submitted two documents to document the release response and remediation efforts for this site in July 2018 and September 2018 (Attachments 3 and 4, respectively). A review of file information has not indicated a response from the BLM or NMOCD for the final report (SMA, September 2018). Chevron acquired the lease for these wells in October 2018. Accordingly, we are respectfully requesting a review and determination of the attached SMA reports. The Site Assessment/Characterization and Remediation Plan C-141 forms have been completed based on the NEPAassist database and information provided in previous documents. Please note field data, boring or excavation logs, and photographs including date and GIS information are not available.

Sincerely,

Arcadis U.S., Inc.



Rebecca Andresen  
Vice President

Copies:

Jason Michelson, Chevron/CEMC

## Attachments

- 1 C-141 Site Assessment/Characterization and Remediation Plan Forms
- 2 South Culebra Bluff 5B to Candelario 4' Polyline Release Form C-141
- 3 SMA July 2018 South Culebra Bluff 5B to Candelario 4' Polyline Release Report
- 4 SMA September 2018 South Culebra Bluff 5B to Candelario 4' Polyline Release Report

Incident ID	2RP-4737
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	17 (ft bgs)
Did this release impact groundwater or surface water?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### **Characterization Report Checklist: Each of the following items must be included in the report.**


- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data \*
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs\*
- ☐ Photographs including date and GIS information\*
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

\*Note field data, boring or excavation logs, and photographs including date and GIS information were not included with files available on the NMOCD site.

Incident ID	2RP-4737
District RP	
Facility ID	
Application ID	

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

Printed Name: Jason C. MichelsonTitle: Project Manager: Upstream -EastSignature: Date: 8/26/19email: JMichelson@chevron.comTelephone: 832-854-5601**OCD Only**

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

Incident ID	2RP-4737
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Jason C. MichelsonTitle: Project Manager: Upstream - EastSignature: Date: 8/26/19email: JMichelson@chevron.comTelephone: 832-854-5601**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



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

State of New Mexico  
Energy Minerals and Natural Resources

MAY 08 2018

Form C-141  
Revised April 3, 2017

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

Submit 1 Copy to appropriate District Office in  
District II-ARTESIA O.C.D. accordance with 19.15.29 NMAC.

FAB1813055699

## Release Notification and Corrective Action

NAB1813056113

#37115 OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Rockcliff Operating New Mexico LLC	Contact: John Turner
Address: 1301 McKinney St, Suite 1300, Houston, TX 77010	Telephone No.: 903-643-3791
Facility Name : SCB 5B to Candelario 24-1 SWD 4" Polyline	Facility Type: Produced Water Transfer Line
<del>SOUTH CULEBRA B 5B 4" POLYLINE</del>	
Surface Owner: The Mosaic Company	Mineral Owner: BLM
API No. NA	

## LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	24	23s	28e					Eddy

Latitude 32.294911 Longitude -104.043545 NAD 83

## NATURE OF RELEASE

Type of Release: Produced Saltwater/Oil	Volume of Release: PW ~720 bbls, Oil ~7.2 bbls	Volume Recovered: ~ 385 bbls
Source of Release: 4" Polyline – Produced Water Transfer Line	Date and Hour of Occurrence: 4/26/18	Date and Hour of Discovery: 4/30/18, 0823hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher NMOCD & National Response Center	
By Whom? John Turner	Date and Hour: 4/30/18 0853 hrs	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. Unknown – but appears to be minimal	

If a Watercourse was Impacted, Describe Fully.\*

Yes – Pecos River. Point of Release was approximately 150 feet from the river, on the west side of the bluff. Release fluids first pooled at the bottom of the bluff, then flowed toward the river.

Describe Cause of Problem and Remedial Action Taken.\* On 4-26-18, it appears that a 3<sup>rd</sup> party ran over the 4" polyline that transfers produced water from the SCB #5B CTB to the Candelario 24-1 SWD disposal well and caused a failure in the line. The 3<sup>rd</sup> party notified The Mosaic Company, the landowner. The landowner responded to the notification believing it was one of their freshwater lines and used clamps to pinch the polyline on both sides of the damaged area to stop the release. Once the release was secured they left the jobsite for the weekend. Very little liquid was released at this time according to 3<sup>rd</sup> Party. 3<sup>rd</sup> Party returned to the job site on the morning of 4-30-18 and noticed the upstream clamp was gone and fluid was being released to the ground. 3<sup>rd</sup> Party notified the landowner again and landowner responded. The landowner determined this was not their line and notified Rockcliff's emergency number of a polyline leaking produced water between the SCB #5B CTB and Candelario SWD and that the water was going in the Pecos River. Rockcliff called Souder Miller & Associates to respond to the spill for assessment, cleanup, and remediation.

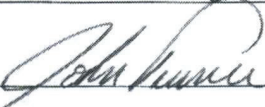
Describe Area Affected and Cleanup Action Taken.\*

Initial emergency actions began with the construction of a large earthen berm to hinder fluid movement. After an emergency one call cleared, dirt work crews immediately began excavation of impacted material nearest to the river and a vac truck was called to remove all standing fluid. In addition, a hydro-excavator was called to remove impacted caliche in the road construction area. Absorbent boom was deployed across the pooled area and downstream of the point of entry.

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

## OIL CONSERVATION DIVISION

Signature:



Printed Name: John Turner

Approved by Environmental Specialist:



Title: Field Sr. Environmental Specialist

Approval Date: 5/10/18

Expiration Date: N/A

E-mail Address: jturner@rockcliffenergy.com

Conditions of Approval:

Date: 5-8-18

Phone: 903-475-1865

See attached

Attached:

APP-4737

\* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 5/8/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4737 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

*The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]*

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 6/8/2018.** If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted



for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

**Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.**

**Jim Griswold**  
OCD Environmental Bureau Chief  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
505-476-3465  
[jim.griswold@state.nm.us](mailto:jim.griswold@state.nm.us)

**Bratcher, Mike, EMNRD**

---

**From:** John Turner <John.Turner@Rockcliffenergy.com>  
**Sent:** Tuesday, May 8, 2018 4:25 PM  
**To:** Bratcher, Mike, EMNRD; Tucker, Shelly; Weaver, Crystal, EMNRD; Gregston, Terry; Holcomb, Sarah, NMENV; Ellington, Brent, OSE  
**Cc:** Nick Koch; Mike Martin; Darrell Taylor; Brian Borque; Jamie Robinson; Greg McCain  
**Subject:** SCB 5B to Candelario 24-1 SWD 4" Polyline C-141 Release Notification - Rockcliff Energy Operating New Mexico LLC  
**Attachments:** SCB\_5B\_to\_Candelarie\_Polyline\_Release\_NMOCD\_C-141\_5-8-18.pdf

Please find attached the initial Form C-141, Release Notification and Corrective Action, for the release that occurred on Rockcliff Operating New Mexico LLC's 4" produced water transfer polyline near Fishermans Lane discovered on April 30, 2018.

If you have any questions or concerns please do not hesitate to contact me.

Thank you,

**John Turner**  
**Rockcliff Energy, LLC**  
Sr. Environmental Specialist  
342 Johnny Clark Rd  
Longview, TX 75603  
O: (903) 475-1865  
C: (903) 261-4673  
[jturner@rockcliffenergy.com](mailto:jturner@rockcliffenergy.com)





July 4, 2018

#5E26934-BG5

NMOCD District 2  
Mike Bratcher  
811 South First Street  
Artesia, NM 88210

**SUBJECT: REMEDIATION REPORT OF THE EMERGENCY RESPONSE ASSOCIATED WITH THE SCB 5B TO CANDELARIO 4" POLYLINE, EDDY COUNTY, NEW MEXICO**

Dear Mr. Bratcher:

On behalf of Rockcliff Operating New Mexico LLC (Rockcliff), Souder, Miller & Associates (SMA) has prepared this report that describes the initial action, delineation and remediation for a release associated with the SCB 5B to Candelario 4" Polyline. The site is in SECTION 24, TOWNSHIP 23S, RANGE 28E, Eddy County, New Mexico, on private property. Figure 1 illustrates the vicinity and location of the site.

**Table 1**, below, summarizes information regarding the release.

<b>Table 1: Release information and Site Ranking</b>	
Name	SCB 5B to Candelario 4" Polyline
Company	Rockcliff Operating New Mexico LLC
Incident Number	nAB1813056113
API Number	N/A
Location	32.294911, -104.043545
Estimated Date of Release	April 26, 2018 – April 29, 2018
Date Reported to NMOCD	April 30, 2018
Land Owner	Mosaic Potash
Reported To	NM Oil Conservation Division (NMOCD)
Source of Release	Produced Water Transfer Line
Released Material	Produced Water & Crude Oil
Released Volume	Approx. 720 bbls PW & Approx. 7.2 bbls Crude Oil
Recovered Volume	Approx. 385 bbls
Net Release	Approx. 342.2 bbls
Nearest Waterway	Approximately 0.2 miles southwest of the Pecos River
Depth to Groundwater	Less than 50 feet
Nearest Domestic Water Source	Less than 1000 feet
NMOCD Ranking	20
SMA Response Dates	Initial: April 30 – May 4, May 7, May 15, 2018

## **1.0 Background**

On April 26, 2018, a third party, ran over the 4" polyline that transfers produced water from the SCB #5B CTB to the Candelario SWD #1 disposal well, which caused a failure in the line. The 3rd party notified the landowner, Mosaic Company. Mosaic responded to the notification believing it was one of their freshwater lines and used clamps to pinch the polyline on both sides of the damaged area. Once the line was secured, Mosaic left the jobsite for the weekend. A very small amount of liquid was released at this point. The original third party then returned to the job site on the morning of April 30, 2018 to find the upstream clamp that Mosaic placed was missing and fluid was being released in the surrounding area. The third party immediately notified Mosaic. Upon returning to the site, Mosaic determined that this was not one of their freshwater lines, but one of Rockcliff's produced water transfer lines. Mosaic notified Rockcliff on May 30<sup>th</sup>, 2018 via their emergency number that a polyline near Fisherman's Lane and the Candelario SWD #1 was releasing fluid and going into the Pecos River.

The release ran from the polyline across Fisherman's Lane and split into two individual paths. One path flowed over the edge of the ravine to the northeast, briefly diverging and then merging before entering the river. The other path flowed down the south side of the road, downhill towards the low water crossing, eventually pooling between the forms of a currently active county roadworks project and spreading to the north where the majority of the release pooled. Approximately 40,400 square feet of surface area was impacted including stockpiled rock and dirt to be used for Fisherman's Lane road construction project

## **2.0 Site Ranking and Land Jurisdiction**

The release site is located approximately 0.2 miles from the Pecos River, with an elevation of approximately 2951 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be less than 50 feet below ground surface (bgs). SMA searched the New Mexico State Engineers' Office's (NMOSE) database for water wells in the area and found 2 wells within 1000 feet, both with a depth to groundwater at 31 feet, and 102 wells within 3 miles of the site with an average depth to ground water at 40 feet.

Recommended Remediation Action Levels (RRALs) are determined by the site ranking according to the NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (1993). Below in Table 2 are the remediation standards and the site ranking for this location. Justification for this site ranking is found in Figure 1 and Appendix B.

Table 2. **Site Ranking**

<b>Soil Remediation Standards</b>	<b>0 to 9</b>	<b>10 to 19</b>	<b>&gt;19</b>
<b>Benzene</b>	<b>10 PPM</b>	<b>10 PPM</b>	<b>10 PPM</b>
<b>BTEX</b>	<b>50 PPM</b>	<b>50 PPM</b>	<b>50 PPM</b>
<b>TPH</b>	<b>5000 PPM</b>	<b>1000 PPM</b>	<b>100 PPM</b>

<b>Depth to Groundwater</b>	<b>NMOCD Numeric Rank</b>
< 50 BGS = 20	20
50' to 99' = 10	
>100' = 0	
<b>Distance to Nearest Surface Water</b>	<b>NMOCD Numeric Rank</b>
< 200' = 20	20
200' - 1000' = 10	
>1000' = 0	
<b>Well Head Protection</b>	<b>NMOCD Numeric Rank</b>
<1000' (or <200' domestic) = 20	20
> 1000' = 0	
<b>Total Site Ranking</b>	<b>20</b>

### **3.0 Initial Action & Release Characterization**

On April 30, 2018, SMA received a phone call from Rockcliff at approximately 8:44 AM reporting the release and requesting an emergency response to be initiated. SMA field personnel mobilized to the emergency response location to perform initial action. Rockcliff notified the NMOCD at 8:53 am and the National Response Center at 9:35 am. En route, an emergency one call was placed, and Talon LPE was contacted to place booms in the river to provide containment around the two points of entry as well as downstream (3 total). SMA personnel were met onsite by our sub-contractor C&M Services, representatives from Mosaic (landowners), Rockcliff, Eddy County, Pettigrew Engineering & Sedona (engineers and contractors completing a roadworks project on the low water crossing, whose site had now been compromised). At this time, berms had been placed around the banks of the river and hydro excavators and vacuum trucks were mobilized to remove the freestanding fluid. After assessing the release area, SMA personnel began to guide the removal of impacted material near the northern bank of the river. Soil samples were field screened with an electrical conductivity meter (EC) and a PID to characterize and delineate the area (L1-L9). In most cases, the equipment reached refusal at 0.5-foot or 1-foot and material was removed to bedrock. Water samples were collected from the river at the two established points of entry (POE 1 & POE 2 on Figure 2), 150 meters upstream and 150 meters downstream (4 locations in total). Water samples at these locations continued to be collected until three days of consistently clean results were returned. The location was secured, and SMA completed boom and berm inspections, with the river being the priority of all parties involved. The Bureau of Land Management (BLM), the Army Corps of Engineers, the Interstate Stream Commission, and the New Mexico Department of Fish and Game visited the site throughout the afternoon to monitor first response efforts. The only request was by New Mexico Department of Fish and Game to complete a biological survey at least 700 feet downstream of the point of entry.

On May 1, 2018, SMA returned to the location to continue oversight of the removal of free standing fluid and delineation of the release. Water samples were collected, and the booms and berms were inspected. SMA personnel completed a biological survey from the low water crossing approximately 0.5

miles downstream as requested by New Mexico's Department of Fish and Game. A large assortment of local wildlife was witnessed, with no evidence of impacted wildlife.

Sample points on either side of the construction forms in the portion of the road just south of the bridge were established to assess possible deferment (SW1 – SW30). Sample points were also established in the now-vacuumed pooling areas (L10-L14). Soil samples were field screened with an EC meter and a PID and results recorded.

On May 2, 2018, SMA arrived onsite and collected water samples from the four sample locations and performed a boom and berm inspection. The integrity of both were in good shape and there seemed to be no buildup or accumulation of oil. There was also a very lively presence of wildlife in the area.

SMA completed a delineation and excavation of impacted soil on the sloping road that leads down to the low-river crossing. The excavation was guided using an EC meter and a PID. Sample points HSW1-HSW16 and HSW18 were established on the north and south side of release path to represent the horizontal delineation of the impact (placed every 30 feet). Further delineation could not be completed on the south side of the road as it was bound by an underground pipeline. Sample points HBH1-HBH11 represent the vertical extent. Each bottom hole sample was delineated to refusal (0.5 feet to 3 feet). In the cases where field screens showed the material just before the bedrock were above RRAL's, rock samples were taken. Due to this being a relatively high traffic area the road was excavated and then backfilled with clean material for the safety of the public and the construction company onsite.

While the delineation and excavation of this part of the road was ongoing, removal of the remaining standing fluid was completed. Approximately 385 bbls of recovered fluid was collected and disposed of at R360s Red Bluff Facility. Impacted soil and riprap continued to be stock piled on liners and hauled off to disposal at Lea Land, LLC's Carlsbad, NM disposal facility

On May 3, 2018, SMA met Mosaic onsite to update them on the progress of the response. Water samples were again collected, and a boom and berm inspection was completed. The berm just south of POE #2 was reinforced and contamination was scraped from the bottom and removed. Refusal rock samples were collected from sample locations L1-L9.

As the river was now secure, SMA delineated around the source of the release at the top of the hill. Samples points S1 through S4 were established, with S1 representing the source. Each sample location was delineated to 2 feet or to refusal, whichever came first.

On May 4 2018, SMA personnel was met onsite by Pettigrew Engineering. Drone images were taken by Pettigrew while SMA collected water samples and began the extensive mapping of all equipment, infrastructure and pipelines. A complete site analysis was completed of the release location and the banks on either side of the river. There were no observations noted of negative impacts to wildlife and the booms and berms were stable.

Later that evening, SMA received a call from Rockcliff, requesting the boom to be repaired as BLM was onsite and noted a breach in one of the booms had occurred. Mosaics lay flat line that crossed the river had become active and expanded under the boom, causing a small section of the boom to lift up. SMA mobilized to the location to place the boom further downstream away from the line. Upon arrival, SMA personnel found a leak in Mosaic's lay flat line that was discharging into the river. This release was documented, and Mosaic was contacted.

On May 7 2018, after reviewing the laboratory analysis that had been completed, SMA returned to the location. Water samples were collected, and a full boom and berm inspection was completed. Talon LPE was dispatched to the site to replace the booms, as there was silt buildup on them. Later that morning, Mosaic arrived onsite to repair the lay flat line that had failed.

SMA returned to the location on May 15, 2018 to meet with Rockcliff's Sr. Environmental Specialist and the BLM. Sedona was also present for the meeting to address the now paused roadworks project. BLM Agent Terry Gregston was shown all sample and background locations, was briefed on the work done and inspected the booms and berms. While on site, the BLM gave verbal approval to pour concrete within the forms and continue road construction for the time being. Rockcliff obtained written correspondence from both the BLM and NMOCD stating they were in agreement with the county road construction project to continue and concrete could be poured.

All samples were collected and processed according to NMOCD soil sampling procedures. Due to the varying geology of the area, a background sample was taken for each NRCS soil type represented in the release area in addition to the background samples collected relative to each group of samples. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analysis for BTEX by EPA Method 8021, TPH EPA Method 418.1 and chlorides EPA Method 300.0. Sample locations are depicted on Figure 2. All laboratory results are summarized in Table 3. Laboratory reports are included in Appendix C.

#### **4.0 Soil Remediation Proposal**

The release ran from the polyline across Fisherman's Lane and split into two individual paths. One path flowed over the edge of the ravine to the northeast, briefly diverging and then merging before entering the river. This first path is represented by the collection of sample sites L1-L9. The sample points collected on this northeast path are of the removed and disposed of soil and not of the conglomerated rock material that remains today.

Approximately 40,400 square feet of surface area and a large amount of construction materials were impacted. During the initial response, a large amount of the release was excavated and disposed of at an NMOCD approved facility. After reviewing the laboratory analysis, SMA found that the initial actions taken removed the bulk of hydrocarbon and brine affected material.

SMA proposes that a hydro excavation be performed to wash the northeast flow path. The area will need to be bermed with clean soil to prevent any accidental flow into the river. Also, SMA and its subcontractors will use absorbent booms to surround the work area and will make all reasonable attempts to collect any wash fluid with the berms, boom and vacuum trucks. All collected fluid will be disposed of in a Class 2 injection well in accordance with NMOCD guidance for RCRA exempt material. To comply with NMOCD regulations, SMA will use fresh water (as defined by NMAC 20.6.2.3103 and NMOCD Fresh Water Stations Memo 8/08) and will collect water quality data from the source.

The other path flowed down the south side of the road, downhill towards the low water crossing, eventually pooling between the forms of a currently active county roadworks project represented by sample locations SW1-SW30.

SMA proposes that the affected soil on and around the concrete forms should be removed and disposed of after the completion of the road construction activities, represented by SW3, SW5, SW7,

SW9, SW15, SW27, SW17, SW29, and SW30. After concrete has set, SMA plans further confirmation sampling to establish horizontal delineation at those locations.

Rockcliff requested deferral for the sample locations on the interior of the road (SW2, SW4, SW6, SW8, SW10, SW12, SW14) due to reaching conglomerate rock material on the bottom and after the county poured concrete the impacted area would be encapsulated by concrete on top and on either side and conglomerate rock on the bottom. The requested deferral was reviewed and approved in the field by BLM and later by the NMOCD (see attached emails in Appendix D). The deferral allowed the county to continue with their project and not have to remove the rebar and concrete forms at a significant expense for a minimal amount of impacted area.

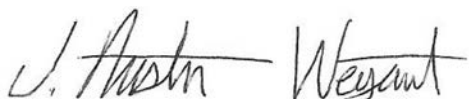
The source of the release, where the poly-pipe was struck by equipment, is represented by samples S1-S4, and the start of the second flow path represented by HSW1-HSW14. SMA proposes a guided excavation of the area surrounding the source and the path along the southern boundary of the road. Several of the sidewall samples from the previously initial action returned clean samples but locations S1, HSW10, HSW14, and HSW16 require further excavation and horizontal delineation. All the bottom hole samples collected in the source and second flow path are the excavated and disposed of soil that sat directly upon the conglomerate rock material that was so pervasive on this site. Sample locations S2, S3, S4 and HBH1- HBH10 are all discrete samples collected from the soil removed from off the conglomerated "bedrock" as defined by (NRCS soil survey Eddy County 1974).

## **5.0 Scope and Limitations**

The scope of our services consisted of the performance of assessment sampling, verification of release stabilization, regulatory liaison, and preparation of this work plan. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

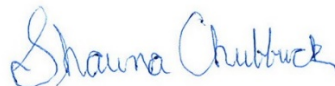
If there are any questions regarding this report, please contact either Austin Weyant at 575-689-8801 or Shawna Chubbuck at (970) 565-4465 x1504 .

Submitted by:  
SOUDER, MILLER & ASSOCIATES



Austin Weyant  
Project Scientist

Reviewed by:



Shawna Chubbuck  
Senior Scientist

**ATTACHMENTS:**

**Figures:**

Figure 1: Vicinity and Well Head Protection Map

Figure 2: Site and Sample Location Map

**Tables:**

Table 3: Summary of Sample Results

**Appendices:**

Appendix A: Form C141

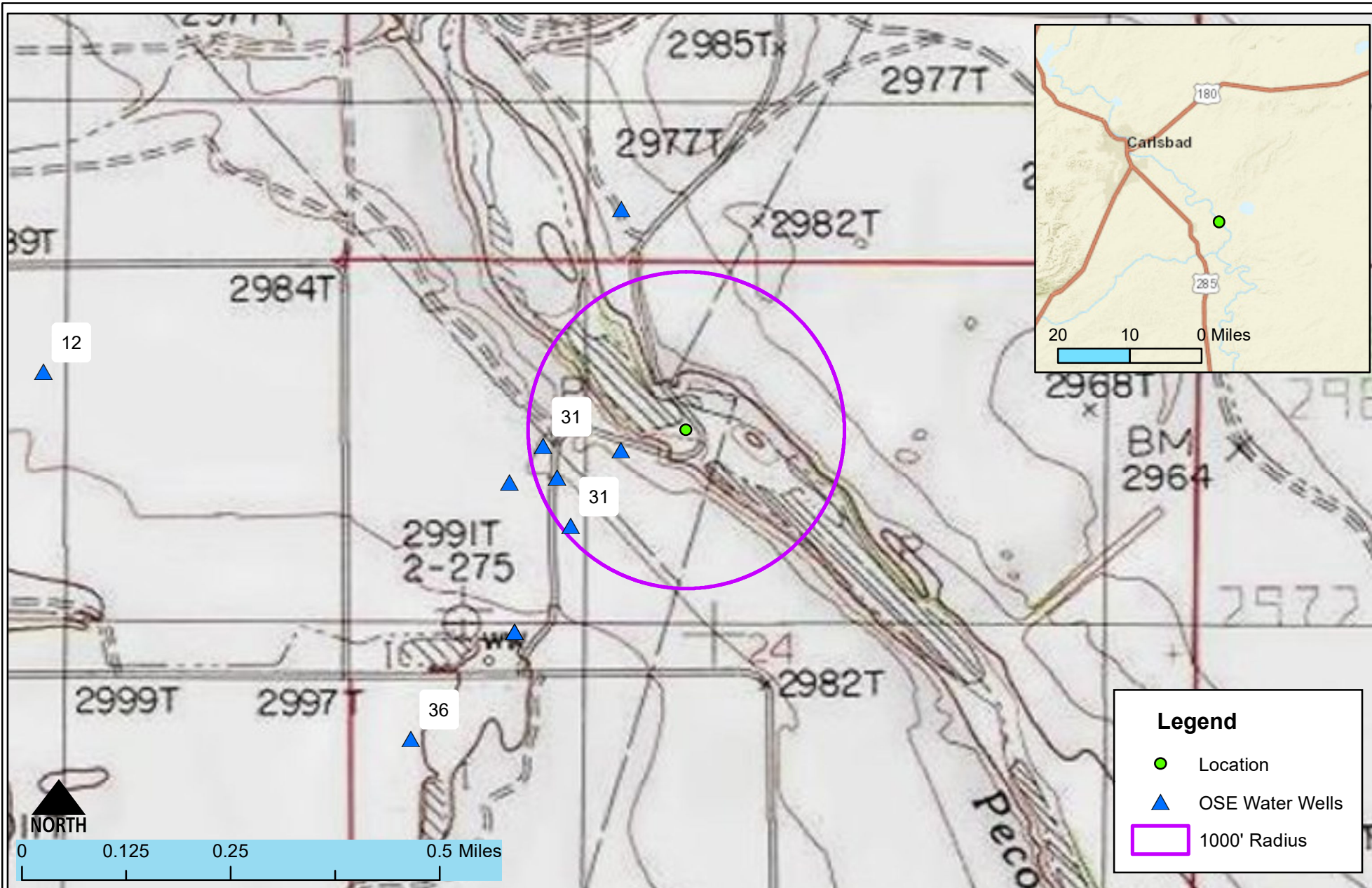
Appendix B: NMOSE Wells Report

Appendix C: Laboratory Analytical Reports

Appendix D: Correspondence

FIGURE 1  
VICINITY AND NMOSE  
DATA MAP





Site Vicinity & NMOSE Well Location Map  
Candelario Emergency Response - Rockcliff Energy  
Eddy County, New Mexico

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**FIGURE 2**  
**SITE AND SAMPLE**  
**LOCATION MAPS**





**Legend**

- Berm
- Pipelines & Flowlines
- Booms
- Sedona's Yard
- Spill Path

General Site Map  
Candelario Emergency Response - Rockcliff Energy  
Eddy County, New Mexico

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Background & Water Sample Locations  
Candelario Emergency Response - Rockcliff Energy  
Eddy County, New Mexico

Date Saved:  
6/25/2018

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Sample Location Map  
Candelario Emergency Response - Rockcliff Energy  
Eddy County, New Mexico

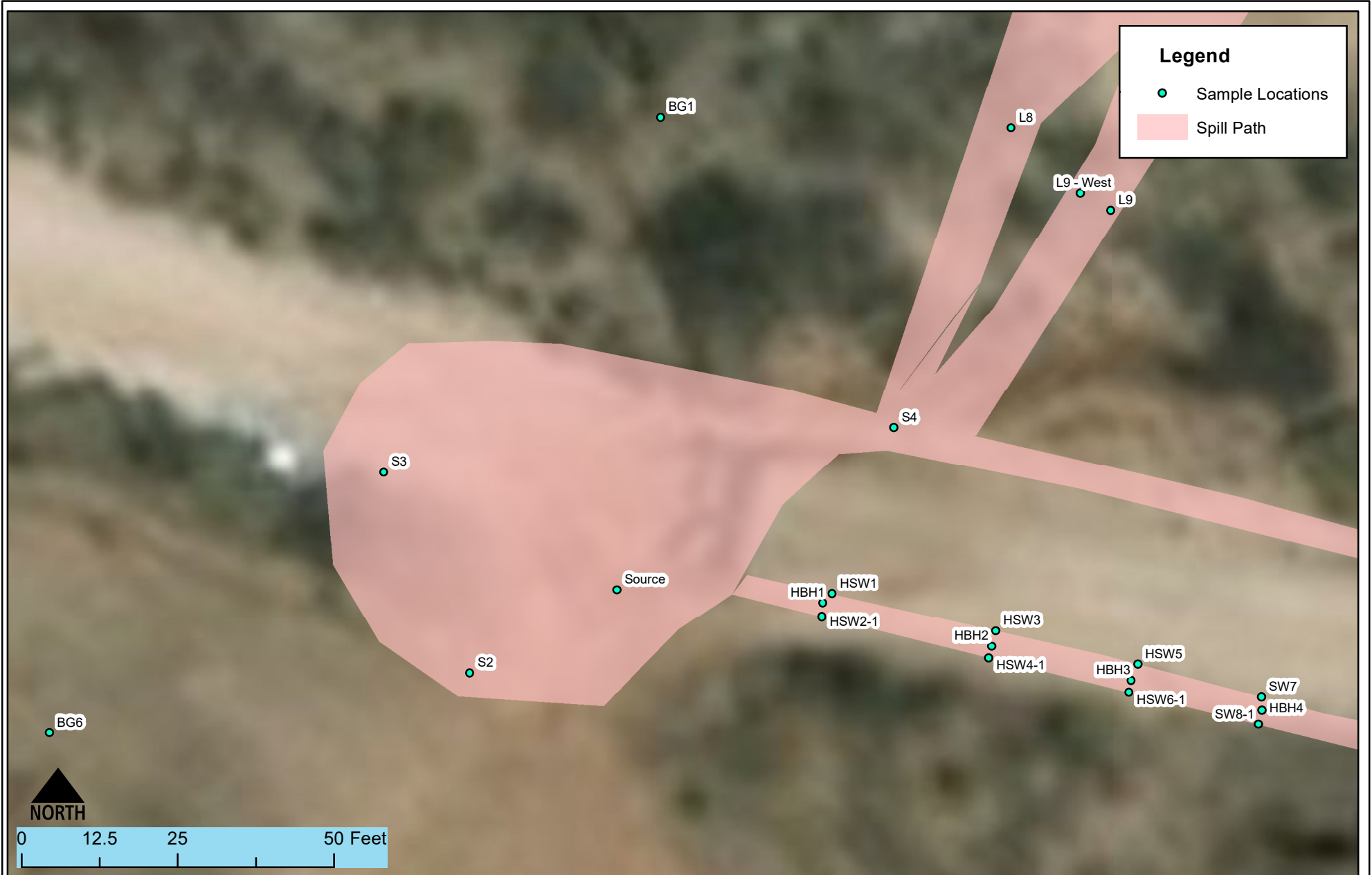
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Sample Location Map  
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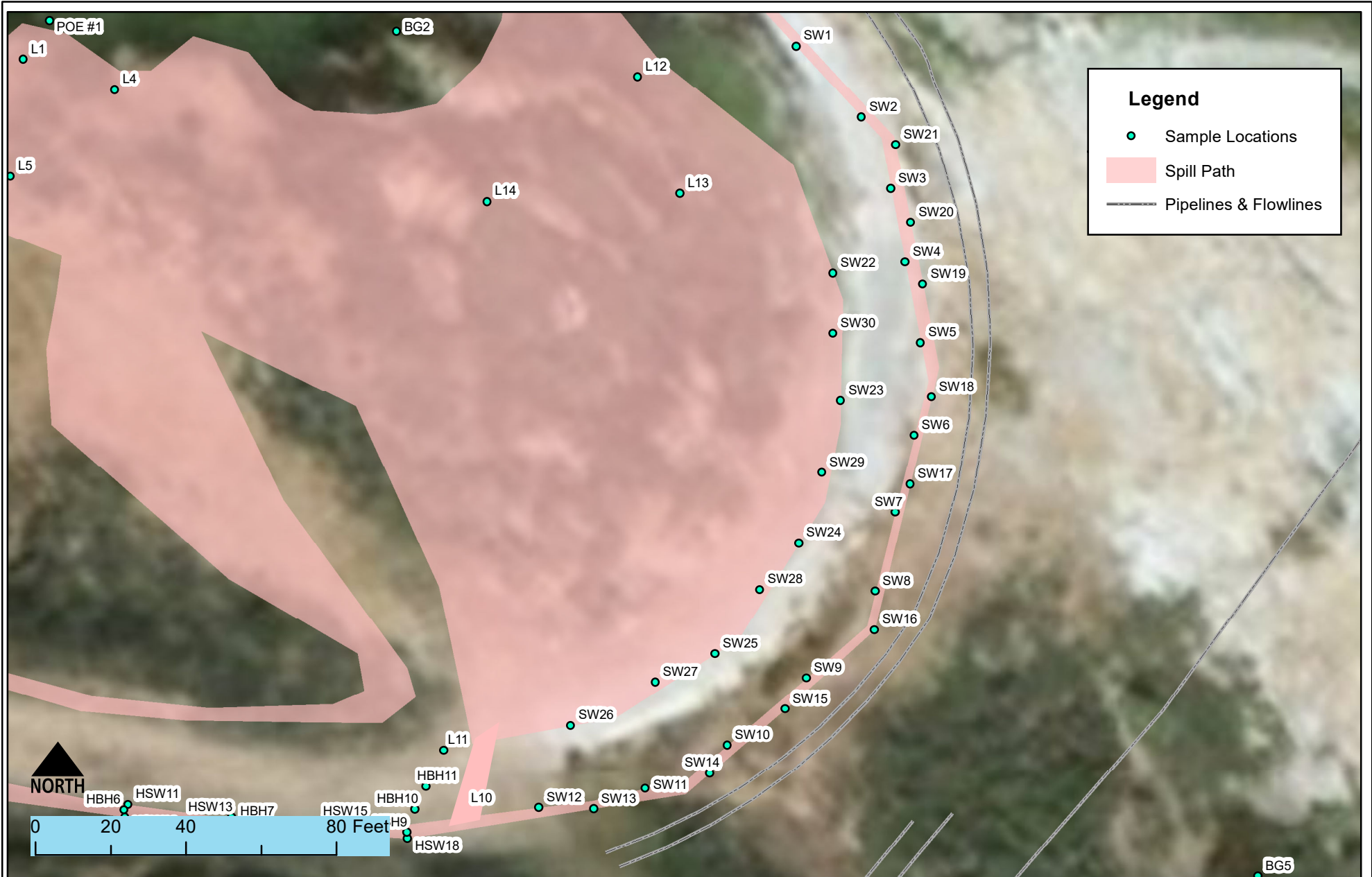
Sample Location Map  
Candelario Emergency Response - Rockcliff Energy  
Eddy County, New Mexico

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Sample Location Map  
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**TABLE 3**  
**SUMMARY SAMPLE RESULTS**

## Candelario Emergency Response Sample Summary Table

Sample Number on Figure 2	Sample Date	BTEX µg/L	Benzene µg/L	GRO mg/L	DRO mg/L	MRO mg/L	Total TPH mg/L	TDS mg/L	Cl- Lab mg/L
NMOCD RRAL's for Site Ranking 20			0.01 mg/l (10 µg/L)						
Upstream	4/30/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	--	1300
	5/1/2018	--	--	--	--	--	--	--	--
	5/2/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4720	1200
	5/3/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4990	1100
	5/4/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4770	1300
	5/7/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4980	1400
Downstream	4/30/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4770	1400
	5/1/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	--	1300
	5/2/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4760	1200
	5/3/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4740	1400
	5/4/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4630	1300
	5/7/2018	--	--	--	--	--	--	4610	1300
POE #1	4/30/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4770	1300
	5/1/2018 (8am)	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	--	1100
	5/1/2018 (5pm)	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	--	1200
	5/2/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4700	1200
	5/3/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4770	1200
	5/4/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4600	1300
	5/7/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4610	1200
POE #2	4/30/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4830	1300
	5/1/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	--	1200
	5/2/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4770	1200
	5/3/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4700	1200
	5/4/2018	<4.5	<1.0	<0.050	<1.0	<5.0	<6.05	4520	1200
	5/7/2018	--	--	--	--	--	--	4580	1200

excavated

-- = Not Analyzed

exceeds RRAL's

### Candelario Emergency Response Sample Summary Table

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Completed Action	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- Lab mg/Kg	Soil Type
NMOCD RRAL's for Site Ranking of 20				50 mg/Kg	10 mg/Kg				100 mg/Kg		
L1	5/3/2018	0.5	excavated	<0.217	<0.024	<4.8	<9.4	<47	<61.2	850	
L2	5/3/2018	1.5	excavated	<0.216	<0.024	<4.8	<9.6	<48	<62.4	320	
L3	4/30/2018	1	excavated	<0.221	<0.025	<4.9	41	<47	41	6500	
L4	5/3/2018	1	excavated	<0.224	<0.025	<5.0	<9.4	<47	<61.4	19000	
L5	4/30/2018	1	excavated	<0.210	<0.023	5.9	69	<49	74.9	72000	
L6	5/3/2018	1	excavated	<0.219	<0.024	<4.9	<9.1	<45	<59	1600	
L7	5/3/2018	0.5	excavated	<0.213	<0.024	<4.7	15	<48	15	4200	
L8	5/3/2018	0.5	excavated	<0.219	<0.024	<4.9	<10	<50	<64.9	160	
L9	4/30/2018	0.5	excavated	<0.221	0.025	<4.9	<9.5	<47	<61.4	5400	
L9 West	5/3/2018	0.5	excavated	<0.225	<0.025	<5.0	<9.0	<45	<59	8000	
L10	5/1/2018	2	excavated	<0.207	<0.023	<4.6	<9.6	<48	<62.2	16000	
	5/1/2018	3	excavated	<0.179	<0.020	<4.0	<9.8	<49	<62.8	4900	
L11	5/1/2018	1	excavated	<0.215	0.024	12	130	<47	132	27000	
	5/1/2018	2	excavated	<0.143	<0.016	<3.2	23	<47	23	3800	
L12	5/1/2018	1	excavated	<0.21	<0.023	<4.7	<9.6	<48	<62.3	16000	
	5/1/2018	2	excavated	<0.145	<0.016	<3.2	<9.0	<45	<57.2	8800	
L13	5/3/2018	1	excavated	<0.22	<0.024	<4.9	240	1000	1240	2000	
	5/1/2018	2	excavated	<0.180	<0.020	<4.0	<9.3	<47	<60.3	5800	
BG1	4/30/2018	background	--	--	--	--	--	--	--	9800	Arno-Harkey Complex (sandy)
BG2	5/3/2018	background	--	--	--	--	--	--	--	1100	Arno-Harkey Complex
SW1	5/1/2018	sidewall	deferral	<0.156	<0.017	<3.5	<9.8	<49	<62.3	890	
SW2	5/1/2018	sidewall	deferral	<0.206	<0.023	<4.6	62	68	130	4700	
SW3	5/1/2018	sidewall	deferral	<0.222	<0.025	<4.9	42	<50	42	460	
SW4	5/1/2018	sidewall	deferral	<0.153	<0.017	11	520	370	901	5200	
SW5	5/1/2018	sidewall	deferral	<0.157	<0.017	<3.5	840	630	1470	1200	
SW6	5/1/2018	sidewall	deferral	<0.211	<0.023	<4.7	<9.3	<46	<60	2100	
SW7	5/1/2018	sidewall	deferral	<0.156	<0.017	<3.5	<9.8	<49	<62.3	840	
SW8	5/1/2018	sidewall	deferral	<0.213	<0.024	<4.7	26	<50	26	1300	
SW9	5/1/2018	sidewall	deferral	<0.217	<0.024	<4.8	<10	<50	<64.8	1100	
SW10	5/1/2018	sidewall	deferral	<0.207	<0.023	<4.6	<9.9	<50	<64.5	1100	
SW11	5/1/2018	sidewall	deferral	<0.148	<0.016	<3.3	<8.9	<45	<57.2	420	
SW12	5/1/2018	sidewall	deferral	<0.21	<0.023	<4.7	74	88	162	1200	
SW13	5/1/2018	sidewall	excavated								
SW14	5/1/2018	sidewall	excavated	<0.211	<0.023	<4.7	26	79	105	1700	
SW15	5/1/2018	sidewall	excavated								
SW16	5/1/2018	sidewall	excavated	<0.216	<0.024	<4.8	<10	<50	<64.8	19000	
SW17	5/1/2018	sidewall	excavated	<0.207	<0.023	<4.6	<9.5	<47	<61.1	7700	
SW18	5/1/2018	sidewall	excavated								
SW19	5/1/2018	sidewall	excavated								
SW20	5/1/2018	sidewall	excavated	<0.224	<0.025	<5.0	160	160	320	3900	
SW21	5/1/2018	sidewall	excavated								
SW22	5/1/2018	sidewall	deferral	<0.216	<0.024	<4.8	54	80	134	1000	
SW23	5/1/2018	sidewall	deferral	<0.172	<0.019	<3.8	<9.9	<49	<62.7	760	
SW24	5/1/2018	sidewall	deferral	<0.219	<0.024	<4.9	71	89	160	220	
SW25	5/1/2018	sidewall	deferral	<0.158	<0.018	<3.5	12	<48	12	630	
SW26	5/1/2018	sidewall	deferral	<0.224	<0.025	<5.0	<10	<50	<65	920	
SW27	5/1/2018	sidewall	excavated								
SW28	5/1/2018	sidewall	excavated								
SW29	5/1/2018	sidewall	excavated								
SW30	5/1/2018	sidewall	excavated	--	--	--	--	--	--	1100	
BG3	5/3/2018	background	--	--	--	--	--	--	--	<30	Arno-Harkey Complex
BG5	5/3/2018	background	--	--	--	--	--	--	--	4300	Rocky Riverbed Complex

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Completed Action	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl-Lab mg/Kg	Soil Type
NMOCD RRAL's for Site Ranking of 20				50 mg/Kg	10 mg/Kg				100 mg/Kg		
HSW1	5/2/2018	sidewall	excavated	<0.225	<0.025	<5.0	<10	<50	<65.0	840	
HSW2-1	5/2/2018	sidewall	excavated	<0.219	<0.024	<4.9	<9.8	<49	<63.7	80	
HBH1	5/2/2018	2.5	excavated	<0.21	<0.023	<4.7	<9.9	<49	<63.6	11000	
HSW3	5/2/2018	sidewall	excavated	<0.22	<0.024	<4.9	<9.4	<47	<61.3	1100	
HSW4-1	5/2/2018	sidewall	excavated	<0.215	<0.024	<4.8	<9.7	<48	<62.5	720	
HBH2	5/2/2018	2	excavated	--	--	--	--	--	--	6700	
HSW5	5/2/2018	sidewall	excavated	<0.211	<0.023	<4.7	<10	<50	<64.7	880	
HSW6-1	5/2/2018	sidewall	excavated	<0.207	<0.023	<4.6	<9.6	<48	<62.2	280	
HBH3	5/2/2018	2	excavated	--	--	--	--	--	--	2000	
HSW7	5/2/2018	sidewall	excavated	<0.22	<0.024	<4.9	<9.9	<50	<64.8	340	
HSW8-1	5/2/2018	sidewall	excavated	<0.216	<0.024	<4.8	<9.6	<48	<62.4	510	
HBH4	5/2/2018	3	excavated	<0.215	<0.024	<4.8	<9.2	<46	<60.0	7900	
HSW9	5/2/2018	sidewall	excavated	<0.215	<0.024	<4.8	<9.5	<47	<61.3	210	
HSW10-1	5/2/2018	sidewall	excavated	<0.207	<0.023	<4.6	<9.9	<49	<63.5	98	
HBH5	5/2/2018	3	excavated	<0.211	<0.023	<4.7	<7.8	<39	<51.5	3400	
HSW11	5/2/2018	sidewall	excavated	<0.217	<0.024	<4.8	<9.5	<48	<62.3	310	
HSW12	5/2/2018	sidewall	excavated	<0.224	<0.025	<5.0	<9.8	<49	<63.8	700	
HBH6	5/2/2018	3.5	excavated	<0.22	<0.024	<4.9	<9.9	<50	<64.8	490	
HSW13	5/2/2018	sidewall	excavated	<0.216	<0.024	<4.8	<9.7	<48	<62.5	280	
HSW14	5/2/2018	sidewall	excavated	<0.217	<0.024	<4.8	<9.5	<48	<62.3	1200	
HBH7	5/2/2018	2.5	excavated	<0.219	<0.024	<4.9	<9.5	<47	<61.4	210	
	5/2/2018	3	excavated	<0.215	<0.024	<4.8	<9.4	<47	<61.2	790	
HSW16	5/2/2018	sidewall	excavated	<0.217	<0.024	<4.8	<9.8	<49	<63.6	1600	
HBH8	5/2/2018	2	excavated	--	--	--	--	--	--	3400	
HSW18	5/2/2018	sidewall	excavated	<0.22	<0.024	<4.9	<9.4	<47	<61.3	1100	
HBH9	5/2/2018	2.5	excavated	<0.219	<0.024	<4.9	<9.5	<48	<62.4	910	
HBH10	5/2/2018	0.5	excavated	--	--	--	--	--	--	170	
HBH11	5/2/2018	1	excavated	--	--	--	--	--	--	5200	
		1.5	excavated	--	--	--	--	--	--	450	
BG4	5/3/2018	background	--	--	--	--	--	--	--	250	Anthony Sandy Loam

S1 (Source)	5/7/2018	0.5	to be excavated	<0.212	<0.024	<4.7	<9.9	<49	<63.6	19000	
		1	to be excavated	--	--	--	--	--	--	24000	
		2	to be excavated	--	--	--	--	--	--	7600	
S2	5/7/2018	0.5	to be excavated	<0.224	<0.025	<5.0	<10	<50	<65.0	3800	
		1	to be excavated	--	--	--	--	--	--	230	
		2	to be excavated	--	--	--	--	--	--	1100	
S3	5/7/2018	0.5	to be excavated	<0.221	<0.025	<4.9	22	<49	22	9900	
		1	in-situ	--	--	--	--	--	--	260	
		2	in-situ	--	--	--	--	--	--	35	
S4	5/3/2018	2.5	to be excavated	<0.217	<0.024	<4.8	<9.4	<47	<61.2	2200	Harkey Very Fine
BG6	5/7/2018	background	--	--	--	--	--	--	--	<30	Sandy Loam

excavated

-- = Not Analyzed

exceeds RRAL's

# APPENDIX A

## FORM C141

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

Form C-141  
Revised April 3, 2017

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

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

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Rockcliff Operating New Mexico LLC	Contact: John Turner	
Address: 1301 McKinney St, Suite 1300, Houston, TX 77010	Telephone No.: 903-643-3791	
Facility Name : SCB 5B to Candelario 24-1 SWD 4" Polyline	Facility Type: Produced Water Transfer Line	
Surface Owner: The Mosaic Company	Mineral Owner: BLM	API No. NA

### LOCATION OF RELEASE

Unit Letter C	Section 24	Township 23s	Range 28e	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
------------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	----------------

Latitude 32.294911 Longitude -104.043545 NAD 83

### NATURE OF RELEASE

Type of Release: Produced Saltwater/Oil	Volume of Release: PW ~720 bbls, Oil ~7.2 bbls	Volume Recovered: ~ 385 bbls
Source of Release: 4" Polyline – Produced Water Transfer Line	Date and Hour of Occurrence: 4/26/18	Date and Hour of Discovery 4/30/18, 0823hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher NMOCD & National Response Center	
By Whom? John Turner	Date and Hour: 4/30/18 0853 hrs	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. Unknown – but appears to be minimal	

If a Watercourse was Impacted, Describe Fully.\*

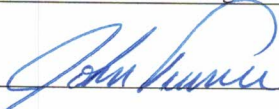
Yes – Pecos River. Point of Release was approximately 150 feet from the river, on the west side of the bluff. Release fluids first pooled at the bottom of the bluff, then flowed toward the river.

Describe Cause of Problem and Remedial Action Taken.\* On 4-26-18, it appears that a 3<sup>rd</sup> party ran over the 4" polyline that transfers produced water from the SCB #5B CTB to the Candelario 24-1 SWD disposal well and caused a failure in the line. The 3<sup>rd</sup> party notified The Mosaic Company, the landowner. The landowner responded to the notification believing it was one of their freshwater lines and used clamps to pinch the polyline on both sides of the damaged area to stop the release. Once the release was secured they left the jobsite for the weekend. Very little liquid was released at this time according to 3<sup>rd</sup> Party. 3<sup>rd</sup> Party returned to the job site on the morning of 4-30-18 and noticed the upstream clamp was gone and fluid was being released to the ground. 3<sup>rd</sup> Party notified the landowner again and landowner responded. The landowner determined this was not their line and notified Rockcliff's emergency number of a polyline leaking produced water between the SCB #5B CTB and Candelario SWD and that the water was going in the Pecos River. Rockcliff called Souder Miller & Associates to respond to the spill for assessment, cleanup, and remediation.

Describe Area Affected and Cleanup Action Taken.\*

Initial emergency actions began with the construction of a large earthen berm to hinder fluid movement. After an emergency one call cleared, dirt work crews immediately began excavation of impacted material nearest to the river and a vac truck was called to remove all standing fluid. In addition, a hydro-excavator was called to remove impacted caliche in the road construction area. Absorbent boom was deployed across the pooled area and downstream of the point of entry.

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

Signature: 	<b>OIL CONSERVATION DIVISION</b>		
Printed Name: John Turner	Approved by Environmental Specialist:		
Title: Field Sr. Environmental Specialist	Approval Date:	Expiration Date:	
E-mail Address: jturner@rockcliffenergy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: <u>5-8-18</u> Phone: 903-475-1865			

\* Attach Additional Sheets If Necessary

# APPENDIX B

## NMOSE WELLS REPORT



# 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- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">C 03965 POD5</a>	CUB	ED		4	1	1	24	23S	28E	589864	3573534	236	35	31	4
<a href="#">C 03965 POD4</a>	CUB	ED			1	4	24	23S	28E	589918	3573381	286	40	31	9

Average Depth to Water: **31 feet**

Minimum Depth: **31 feet**

Maximum Depth: **31 feet**

Record Count: 2

### Basin/County Search:

**Basin:** Carlsbad

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 590088.37

**Northing (Y):** 3573611.93

**Radius:** 305

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



APPENDIX C  
LABORATORY ANALYTICAL  
REPORTS



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

May 07, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario Emergency

OrderNo.: 1805096

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/2/2018 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](http://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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805096**

Date Reported: **5/7/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L3-1

**Project:** Candelario Emergency

**Collection Date:** 4/30/2018 2:30:00 PM

**Lab ID:** 1805096-001

**Matrix:** SOIL

**Received Date:** 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	6500	300		mg/Kg	200	5/4/2018 12:18:56 PM	37926
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	41	9.5		mg/Kg	1	5/3/2018 3:08:35 PM	37913
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/3/2018 3:08:35 PM	37913
Surr: DNOP	78.8	70-130		%Rec	1	5/3/2018 3:08:35 PM	37913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/3/2018 11:05:47 AM	37917
Surr: BFB	92.9	15-316		%Rec	1	5/3/2018 11:05:47 AM	37917
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	5/3/2018 11:05:47 AM	37917
Toluene	ND	0.049		mg/Kg	1	5/3/2018 11:05:47 AM	37917
Ethylbenzene	ND	0.049		mg/Kg	1	5/3/2018 11:05:47 AM	37917
Xylenes, Total	ND	0.098		mg/Kg	1	5/3/2018 11:05:47 AM	37917
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/3/2018 11:05:47 AM	37917

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805096**

Date Reported: **5/7/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L5

**Project:** Candelario Emergency

**Collection Date:** 4/30/2018 2:50:00 PM

**Lab ID:** 1805096-002

**Matrix:** SOIL

**Received Date:** 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	72000	3000		mg/Kg	2E	5/4/2018 12:31:20 PM	37926
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	69	9.9		mg/Kg	1	5/3/2018 3:32:12 PM	37913
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/3/2018 3:32:12 PM	37913
Surr: DNOP	83.1	70-130		%Rec	1	5/3/2018 3:32:12 PM	37913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	5.9	4.7		mg/Kg	1	5/3/2018 11:29:00 AM	37917
Surr: BFB	103	15-316		%Rec	1	5/3/2018 11:29:00 AM	37917
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	5/3/2018 11:29:00 AM	37917
Toluene	ND	0.047		mg/Kg	1	5/3/2018 11:29:00 AM	37917
Ethylbenzene	ND	0.047		mg/Kg	1	5/3/2018 11:29:00 AM	37917
Xylenes, Total	ND	0.093		mg/Kg	1	5/3/2018 11:29:00 AM	37917
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/3/2018 11:29:00 AM	37917

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805096**Date Reported: **5/7/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** L9**Project:** Candelario Emergency**Collection Date:** 4/30/2018 4:45:00 PM**Lab ID:** 1805096-003**Matrix:** SOIL**Received Date:** 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	5400	300		mg/Kg	200	5/4/2018 12:43:45 PM	37926
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/3/2018 3:56:01 PM	37913
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/3/2018 3:56:01 PM	37913
Surr: DNOP	81.5	70-130		%Rec	1	5/3/2018 3:56:01 PM	37913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/3/2018 11:52:15 AM	37917
Surr: BFB	93.8	15-316		%Rec	1	5/3/2018 11:52:15 AM	37917
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	5/3/2018 11:52:15 AM	37917
Toluene	ND	0.049		mg/Kg	1	5/3/2018 11:52:15 AM	37917
Ethylbenzene	ND	0.049		mg/Kg	1	5/3/2018 11:52:15 AM	37917
Xylenes, Total	ND	0.098		mg/Kg	1	5/3/2018 11:52:15 AM	37917
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	5/3/2018 11:52:15 AM	37917

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805096**

Date Reported: **5/7/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** BG1

**Project:** Candelario Emergency

**Collection Date:** 4/30/2018 3:30:00 PM

**Lab ID:** 1805096-004

**Matrix:** SOIL

**Received Date:** 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	9800	750		mg/Kg	500	5/4/2018 12:56:10 PM	37926

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805096

07-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario Emergency

Sample ID	MB-37926		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 37926		RunNo: 51018					
Prep Date:	5/3/2018		Analysis Date: 5/3/2018		SeqNo: 1657508		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-37926		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 37926		RunNo: 51018					
Prep Date:	5/3/2018		Analysis Date: 5/3/2018		SeqNo: 1657509		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805096

07-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario Emergency

Sample ID	LCS-37913		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 37913		RunNo: 51013					
Prep Date:	5/2/2018		Analysis Date: 5/3/2018		SeqNo: 1656310		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.5	70	130			
Surr: DNOP	3.5		5.000		70.6	70	130			

Sample ID	MB-37913		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 37913		RunNo: 51013					
Prep Date:	5/2/2018		Analysis Date: 5/3/2018		SeqNo: 1656311		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	7.9		10.00		78.8	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805096

07-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario Emergency

Sample ID	MB-37917		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 37917		RunNo: 51010					
Prep Date:	5/2/2018		Analysis Date: 5/3/2018		SeqNo: 1657020		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.4	15	316			

Sample ID	LCS-37917		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 37917		RunNo: 51010					
Prep Date:	5/2/2018		Analysis Date: 5/3/2018		SeqNo: 1657025		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	1000		1000		103	15	316			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805096

07-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario Emergency

Sample ID	MB-37917		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 37917		RunNo: 51010					
Prep Date:	5/2/2018		Analysis Date: 5/3/2018		SeqNo: 1657051		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	1.0		1.000		102	80	120			

Sample ID	LCS-37917		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 37917		RunNo: 51010					
Prep Date:	5/2/2018		Analysis Date: 5/3/2018		SeqNo: 1657052		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	100	77.3	128			
Toluene	1.0	0.050	1.000	0	103	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	102	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	104	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	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 Quantitative 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  
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-CARLSBAD

Work Order Number: 1805096

RcptNo: 1

Received By: Isaiah Ortiz

5/2/2018 9:20:00 AM

*Isaiah Ortiz*

Completed By: Michelle Garcia

5/2/2018 10:16:19 AM

*Michelle Garcia*

Reviewed By: ENM

5/2/18

LIB: IMO

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐
- # of preserved bottles checked for pH: IMO  
05/03/18  
Adjusted? 12 or 12 unless noted  
Checked by: \_\_\_\_\_

### Special Handling (if applicable)

15. 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: \_\_\_\_\_

16. Additional remarks: \_\_\_\_\_

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			

**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

email or Fax#:	Project Manager:	
QA/QC Package:	Austin Weyant	
<input type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)	
Accreditation		
<input type="checkbox"/> NELAP	<input type="checkbox"/> Other	Sampler: hwp/mes
		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> EDD (Type)	Sample Temperature: 1.7	

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
11/20/15	2:30	Serum	L3 - 1	402		1805096
{	2:50	S	L5	{		001
	4:45		L9			002
	5:30		B61			003
{						004

A blank sheet of graph paper with a grid pattern. The grid consists of 10 columns and 20 rows of squares. There are faint blue horizontal lines running across the page, creating a series of bands. On the right side, there is a vertical column of small circles, each centered within a row of the grid. A blue ink scribble or signature is visible at the bottom right corner of the page.

Date:	Time:	Relinquished by:	Received by:	Date:	Time:
11/18	0730	<i>[Signature]</i>	<i>[Signature]</i>	5/1/18	0730
5/1/18	1400	<i>[Signature]</i>	<i>[Signature]</i>	5/2/18	920

[illegible]

Remarks:

Rock Cliff

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  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 10, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario EMR

OrderNo.: 1805099

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/2/2018 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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1805099

Date Reported: 5/10/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: POE #1

Project: Candelario EMR

Collection Date: 4/30/2018 10:21:00 AM

Lab ID: 1805099-001

Matrix: AQUEOUS

Received Date: 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>SM2340B: HARDNESS</b>							Analyst: pmf
Hardness (As CaCO3)	2100	6.6		mg/L	1	5/3/2018	R51023
<b>SPECIFIC GRAVITY</b>							Analyst: JRR
Specific Gravity	1.002	0			1	5/4/2018 2:29:00 PM	R51052
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1300	50	*	mg/L	100	5/4/2018 7:57:41 PM	R51061
Sulfate	1400	50	*	mg/L	100	5/4/2018 7:57:41 PM	R51061
<b>SM2510B: SPECIFIC CONDUCTANCE</b>							Analyst: JRR
Conductivity	6500	5.0		µmhos/cm	1	5/2/2018 8:45:31 PM	R51015
<b>SM2320B: ALKALINITY</b>							Analyst: JRR
Bicarbonate (As CaCO3)	156.8	20.00		mg/L CaCO3	1	5/2/2018 8:45:31 PM	R51015
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	5/2/2018 8:45:31 PM	R51015
Total Alkalinity (as CaCO3)	156.8	20.00		mg/L CaCO3	1	5/2/2018 8:45:31 PM	R51015
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: sat
Total Dissolved Solids	4770	20.0	*	mg/L	1	5/3/2018 4:43:00 PM	37915
<b>SM4500-H+B / 9040C: PH</b>							Analyst: JRR
pH	8.07		H	pH units	1	5/2/2018 8:45:31 PM	R51015
<b>EPA METHOD 200.7: DISSOLVED METALS</b>							Analyst: pmf
Calcium	500	10		mg/L	10	5/3/2018 2:55:31 PM	A51023
Iron	ND	0.020		mg/L	1	5/3/2018 2:53:18 PM	A51023
Magnesium	210	10		mg/L	10	5/3/2018 2:55:31 PM	A51023
Potassium	6.6	1.0		mg/L	1	5/3/2018 2:53:18 PM	A51023
Sodium	750	10		mg/L	10	5/3/2018 2:55:31 PM	A51023
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: AG
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/3/2018 7:05:42 PM	A51035
Surr: BFB	101	70-130		%Rec	1	5/3/2018 7:05:42 PM	A51035
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/3/2018 3:28:11 PM	37932
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/3/2018 3:28:11 PM	37932
Surr: DNOP	126	76.7-135		%Rec	1	5/3/2018 3:28:11 PM	37932
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: AG
Benzene	ND	1.0		µg/L	1	5/3/2018 7:05:42 PM	C51035
Toluene	ND	1.0		µg/L	1	5/3/2018 7:05:42 PM	C51035
Ethylbenzene	ND	1.0		µg/L	1	5/3/2018 7:05:42 PM	C51035
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/3/2018 7:05:42 PM	C51035

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805099**

Date Reported: **5/10/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** POE #1

**Project:** Candelario EMR

**Collection Date:** 4/30/2018 10:21:00 AM

**Lab ID:** 1805099-001

**Matrix:** AQUEOUS

**Received Date:** 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						Analyst: <b>AG</b>	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/3/2018 7:05:42 PM	C51035
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/3/2018 7:05:42 PM	C51035
Xylenes, Total	ND	1.5		µg/L	1	5/3/2018 7:05:42 PM	C51035
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	5/3/2018 7:05:42 PM	C51035
Surr: Toluene-d8	97.1	70-130		%Rec	1	5/3/2018 7:05:42 PM	C51035

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

Analytical Report

Lab Order 1805099

Date Reported: 5/10/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: POE #2

Project: Candelario EMR

Collection Date: 4/30/2018 10:42:00 AM

Lab ID: 1805099-002

Matrix: AQUEOUS

Received Date: 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>SM2340B: HARDNESS</b>							Analyst: pmf
Hardness (As CaCO3)	2100	6.6		mg/L	1	5/3/2018	R51023
<b>SPECIFIC GRAVITY</b>							Analyst: JRR
Specific Gravity	1.000	0			1	5/4/2018 2:29:00 PM	R51052
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1300	50	*	mg/L	100	5/4/2018 8:23:25 PM	R51061
Sulfate	1400	50	*	mg/L	100	5/4/2018 8:23:25 PM	R51061
<b>SM2510B: SPECIFIC CONDUCTANCE</b>							Analyst: JRR
Conductivity	6700	5.0		µmhos/cm	1	5/2/2018 8:59:16 PM	R51015
<b>SM2320B: ALKALINITY</b>							Analyst: JRR
Bicarbonate (As CaCO3)	158.6	20.00		mg/L CaCO3	1	5/2/2018 8:59:16 PM	R51015
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	5/2/2018 8:59:16 PM	R51015
Total Alkalinity (as CaCO3)	158.6	20.00		mg/L CaCO3	1	5/2/2018 8:59:16 PM	R51015
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: sat
Total Dissolved Solids	4830	20.0	*	mg/L	1	5/3/2018 4:43:00 PM	37915
<b>SM4500-H+B / 9040C: PH</b>							Analyst: JRR
pH	8.10		H	pH units	1	5/2/2018 8:59:16 PM	R51015
<b>EPA METHOD 200.7: DISSOLVED METALS</b>							Analyst: pmf
Calcium	510	10		mg/L	10	5/3/2018 3:00:03 PM	A51023
Iron	0.043	0.020		mg/L	1	5/3/2018 2:57:49 PM	A51023
Magnesium	210	10		mg/L	10	5/3/2018 3:00:03 PM	A51023
Potassium	6.9	1.0		mg/L	1	5/3/2018 2:57:49 PM	A51023
Sodium	740	10		mg/L	10	5/3/2018 3:00:03 PM	A51023
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: AG
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/3/2018 7:28:52 PM	A51035
Surr: BFB	104	70-130		%Rec	1	5/3/2018 7:28:52 PM	A51035
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/3/2018 3:50:11 PM	37932
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/3/2018 3:50:11 PM	37932
Surr: DNOP	134	76.7-135		%Rec	1	5/3/2018 3:50:11 PM	37932
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: AG
Benzene	ND	1.0		µg/L	1	5/3/2018 7:28:52 PM	C51035
Toluene	ND	1.0		µg/L	1	5/3/2018 7:28:52 PM	C51035
Ethylbenzene	ND	1.0		µg/L	1	5/3/2018 7:28:52 PM	C51035
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/3/2018 7:28:52 PM	C51035

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805099**

Date Reported: **5/10/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** POE #2

**Project:** Candelario EMR

**Collection Date:** 4/30/2018 10:42:00 AM

**Lab ID:** 1805099-002

**Matrix:** AQUEOUS

**Received Date:** 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/3/2018 7:28:52 PM	C51035
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/3/2018 7:28:52 PM	C51035
Xylenes, Total	ND	1.5		µg/L	1	5/3/2018 7:28:52 PM	C51035
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	5/3/2018 7:28:52 PM	C51035
Surr: Toluene-d8	97.3	70-130		%Rec	1	5/3/2018 7:28:52 PM	C51035

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

Analytical Report

Lab Order 1805099

Date Reported: 5/10/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: Up Stream

Project: Candelario EMR

Collection Date: 4/30/2018 11:35:00 AM

Lab ID: 1805099-003

Matrix: AQUEOUS

Received Date: 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>SM2340B: HARDNESS</b>							Analyst: pmf
Hardness (As CaCO <sub>3</sub> )	2200	6.6		mg/L	1	5/3/2018	R51023
<b>SPECIFIC GRAVITY</b>							Analyst: JRR
Specific Gravity	1.002	0			1	5/4/2018 2:29:00 PM	R51052
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1300	50	*	mg/L	100	5/6/2018 11:37:37 AM	R51075
Sulfate	1500	50	*	mg/L	100	5/6/2018 11:37:37 AM	R51075
<b>SM2510B: SPECIFIC CONDUCTANCE</b>							Analyst: JRR
Conductivity	6500	5.0		µmhos/cm	1	5/2/2018 9:09:07 PM	R51015
<b>SM2320B: ALKALINITY</b>							Analyst: JRR
Bicarbonate (As CaCO <sub>3</sub> )	158.6	20.00		mg/L CaCO <sub>3</sub>	1	5/2/2018 9:09:07 PM	R51015
Carbonate (As CaCO <sub>3</sub> )	ND	2.000		mg/L CaCO <sub>3</sub>	1	5/2/2018 9:09:07 PM	R51015
Total Alkalinity (as CaCO <sub>3</sub> )	158.6	20.00		mg/L CaCO <sub>3</sub>	1	5/2/2018 9:09:07 PM	R51015
<b>SM4500-H+B / 9040C: PH</b>							Analyst: JRR
pH	8.15		H	pH units	1	5/2/2018 9:09:07 PM	R51015
<b>EPA METHOD 200.7: DISSOLVED METALS</b>							Analyst: pmf
Calcium	520	10		mg/L	10	5/3/2018 3:11:04 PM	A51023
Iron	0.044	0.020		mg/L	1	5/3/2018 3:08:49 PM	A51023
Magnesium	210	10		mg/L	10	5/3/2018 3:11:04 PM	A51023
Potassium	6.7	1.0		mg/L	1	5/3/2018 3:08:49 PM	A51023
Sodium	750	10		mg/L	10	5/3/2018 3:11:04 PM	A51023
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: AG
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/3/2018 2:51:16 PM	A51035
Surr: BFB	105	70-130		%Rec	1	5/3/2018 2:51:16 PM	A51035
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/3/2018 4:12:16 PM	37932
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/3/2018 4:12:16 PM	37932
Surr: DNOP	131	76.7-135		%Rec	1	5/3/2018 4:12:16 PM	37932
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: AG
Benzene	ND	1.0		µg/L	1	5/3/2018 2:51:16 PM	C51035
Toluene	ND	1.0		µg/L	1	5/3/2018 2:51:16 PM	C51035
Ethylbenzene	ND	1.0		µg/L	1	5/3/2018 2:51:16 PM	C51035
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/3/2018 2:51:16 PM	C51035
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/3/2018 2:51:16 PM	C51035
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/3/2018 2:51:16 PM	C51035
Xylenes, Total	ND	1.5		µg/L	1	5/3/2018 2:51:16 PM	C51035

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 Quantitative 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.

## Analytical Report

Lab Order **1805099**

Date Reported: **5/10/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Up Stream

**Project:** Candelario EMR

**Collection Date:** 4/30/2018 11:35:00 AM

**Lab ID:** 1805099-003

**Matrix:** AQUEOUS

**Received Date:** 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	5/3/2018 2:51:16 PM	C51035
Surr: Toluene-d8	95.4	70-130		%Rec	1	5/3/2018 2:51:16 PM	C51035

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

Analytical Report

Lab Order 1805099

Date Reported: 5/10/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: Down Stream

Project: Candelario EMR

Collection Date: 4/30/2018 11:10:00 AM

Lab ID: 1805099-004

Matrix: AQUEOUS

Received Date: 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>SM2340B: HARDNESS</b>							Analyst: pmf
Hardness (As CaCO3)	2200	6.6		mg/L	1	5/3/2018	R51023
<b>SPECIFIC GRAVITY</b>							Analyst: JRR
Specific Gravity	1.000	0			1	5/4/2018 2:29:00 PM	R51052
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1400	50	*	mg/L	100	5/6/2018 12:27:14 PM	R51075
Sulfate	1600	50	*	mg/L	100	5/6/2018 12:27:14 PM	R51075
<b>SM2510B: SPECIFIC CONDUCTANCE</b>							Analyst: JRR
Conductivity	6500	5.0		µmhos/cm	1	5/2/2018 9:18:54 PM	R51015
<b>SM2320B: ALKALINITY</b>							Analyst: JRR
Bicarbonate (As CaCO3)	158.0	20.00		mg/L CaCO3	1	5/2/2018 9:18:54 PM	R51015
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	5/2/2018 9:18:54 PM	R51015
Total Alkalinity (as CaCO3)	158.0	20.00		mg/L CaCO3	1	5/2/2018 9:18:54 PM	R51015
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: sat
Total Dissolved Solids	4770	40.0	*D	mg/L	1	5/3/2018 4:43:00 PM	37915
<b>SM4500-H+B / 9040C: PH</b>							Analyst: JRR
pH	8.10		H	pH units	1	5/2/2018 9:18:54 PM	R51015
<b>EPA METHOD 200.7: DISSOLVED METALS</b>							Analyst: pmf
Calcium	530	10		mg/L	10	5/3/2018 3:15:34 PM	A51023
Iron	ND	0.020		mg/L	1	5/3/2018 3:13:19 PM	A51023
Magnesium	210	10		mg/L	10	5/3/2018 3:15:34 PM	A51023
Potassium	6.7	1.0		mg/L	1	5/3/2018 3:13:19 PM	A51023
Sodium	760	10		mg/L	10	5/3/2018 3:15:34 PM	A51023
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: AG
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/3/2018 7:52:02 PM	A51035
Surr: BFB	106	70-130		%Rec	1	5/3/2018 7:52:02 PM	A51035
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/3/2018 4:34:16 PM	37932
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/3/2018 4:34:16 PM	37932
Surr: DNOP	135	76.7-135		%Rec	1	5/3/2018 4:34:16 PM	37932
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: AG
Benzene	ND	1.0		µg/L	1	5/3/2018 7:52:02 PM	C51035
Toluene	ND	1.0		µg/L	1	5/3/2018 7:52:02 PM	C51035
Ethylbenzene	ND	1.0		µg/L	1	5/3/2018 7:52:02 PM	C51035
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/3/2018 7:52:02 PM	C51035

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 Quantitative 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.

## Analytical Report

Lab Order **1805099**

Date Reported: **5/10/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Down Stream

**Project:** Candelario EMR

**Collection Date:** 4/30/2018 11:10:00 AM

**Lab ID:** 1805099-004

**Matrix:** AQUEOUS

**Received Date:** 5/2/2018 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/3/2018 7:52:02 PM	C51035
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/3/2018 7:52:02 PM	C51035
Xylenes, Total	ND	1.5		µg/L	1	5/3/2018 7:52:02 PM	C51035
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	5/3/2018 7:52:02 PM	C51035
Surr: Toluene-d8	94.9	70-130		%Rec	1	5/3/2018 7:52:02 PM	C51035

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-A	SampType: MBLK		TestCode: EPA Method 200.7: Dissolved Metals						
Client ID:	PBW	Batch ID: A51023		RunNo: 51023						
Prep Date:		Analysis Date: 5/3/2018		SeqNo: 1657718		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Iron	ND	0.020								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID	LLCS-A		SampType: LCSLL		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC		Batch ID: A51023		RunNo: 51023					
Prep Date:			Analysis Date: 5/3/2018		SeqNo: 1657719		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0	0.5000	0	103	50	150			
Iron	0.023	0.020	0.02000	0	114	50	150			
Magnesium	ND	1.0	0.5000	0	101	50	150			
Potassium	ND	1.0	0.5000	0	107	50	150			
Sodium	ND	1.0	0.5000	0	105	50	150			

Sample ID	LCS-A		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: A51023		RunNo: 51023					
Prep Date:			Analysis Date: 5/3/2018		SeqNo: 1657720		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	50	1.0	50.00	0	100	85	115			
Iron	0.51	0.020	0.5000	0	102	85	115			
Magnesium	50	1.0	50.00	0	100	85	115			
Potassium	50	1.0	50.00	0	100	85	115			
Sodium	52	1.0	50.00	0	103	85	115			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R51061	RunNo:	51061					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658258	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R51061	RunNo:	51061					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658259	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.3	90	110			
Sulfate	9.1	0.50	10.00	0	90.9	90	110			

Sample ID	MB	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R51075	RunNo:	51075					
Prep Date:		Analysis Date:	5/6/2018	SeqNo:	1659029	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R51075	RunNo:	51075					
Prep Date:		Analysis Date:	5/6/2018	SeqNo:	1659030	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.7	90	110			
Sulfate	9.3	0.50	10.00	0	93.1	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	LCS-37932		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 37932		RunNo: 50978					
Prep Date:	5/3/2018		Analysis Date: 5/3/2018		SeqNo: 1656856		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.9	1.0	5.000	0	98.7	70	130			
Surr: DNOP	0.56		0.5000		112	76.7	135			

Sample ID	MB-37932		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 37932		RunNo: 50978					
Prep Date:	5/3/2018		Analysis Date: 5/3/2018		SeqNo: 1656857		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		117	76.7	135			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	100ng lcs	SampType:	LCS4	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	BatchQC	Batch ID:	C51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657258	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.4	80	120			
Toluene	20	1.0	20.00	0	99.4	80	120			
Ethylbenzene	20	1.0	20.00	0	102	80	120			
Methyl tert-butyl ether (MTBE)	23	1.0	20.00	0	115	80	120			
1,2,4-Trimethylbenzene	20	1.0	20.00	0	102	80	120			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	99.8	80	120			
Xylenes, Total	60	1.5	60.00	0	100	80	120			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.3	70	130			
Surr: Toluene-d8	9.5		10.00		95.5	70	130			

Sample ID	rb2	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	C51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657269	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 4-Bromofluorobenzene	11		10.00		114	70	130			
Surr: Toluene-d8	9.7		10.00		96.7	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 Quantitative 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#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	lcs-1 ~20uS eC		SampType: LCS		TestCode: SM2510B: Specific Conductance					
Client ID:	LCSW		Batch ID: R51015		RunNo: 51015					
Prep Date:			Analysis Date: 5/2/2018		SeqNo: 1656500		Units: µmhos/cm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	21	5.0	19.98	0	107	80	120			

Sample ID	1805099-001c dup		SampType: DUP		TestCode: SM2510B: Specific Conductance					
Client ID:	POE #1		Batch ID: R51015		RunNo: 51015					
Prep Date:			Analysis Date: 5/2/2018		SeqNo: 1656510		Units: µmhos/cm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	6500	5.0						0.0790	20	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	A51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657127	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	70	130			
Surr: BFB	9.5		10.00		95.2	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	A51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657128	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	10		10.00		102	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID 1805099-001c dup		SampType: DUP			TestCode: SM4500-H+B / 9040C: pH					
Client ID: POE #1		Batch ID: R51015			RunNo: 51015					
Prep Date:		Analysis Date: 5/2/2018			SeqNo: 1656526		Units: pH units			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
pH	8.08									H

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	mb-1 alk		SampType:	MBLK		TestCode:	SM2320B: Alkalinity				
Client ID:	PBW		Batch ID:	R51015		RunNo:	51015				
Prep Date:			Analysis Date:	5/2/2018		SeqNo:	1656461	Units:	mg/L CaCO3		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Alkalinity (as CaCO3)	ND	20.00									

Sample ID	lcs-1 alk		SampType: LCS		TestCode: SM2320B: Alkalinity					
Client ID:	LCSW		Batch ID: R51015		RunNo: 51015					
Prep Date:			Analysis Date: 5/2/2018		SeqNo: 1656462		Units: mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	80.84	20.00	80.00	0	101	90	110			

Sample ID	mb-2 alk		SampType:	MBLK		TestCode:	SM2320B: Alkalinity				
Client ID:	PBW		Batch ID:	R51015		RunNo:	51015				
Prep Date:			Analysis Date:	5/2/2018		SeqNo:	1656485		Units:	mg/L CaCO3	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Alkalinity (as CaCO3)	ND	20.00									

Sample ID	lcs-2 alk		SampType: LCS		TestCode: SM2320B: Alkalinity					
Client ID:	LCSW		Batch ID: R51015		RunNo: 51015					
Prep Date:			Analysis Date: 5/2/2018		SeqNo: 1656486		Units: mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	80.88	20.00	80.00	0	101	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	1805099-001CDUP	SampType:	DUP	TestCode:	Specific Gravity						
Client ID:	POE #1	Batch ID:	R51052	RunNo:	51052						
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658049	Units:					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Specific Gravity	0.9964	0						0.511	20		

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805099

10-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-37915		SampType:	MBLK		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	PBW		Batch ID:	37915		RunNo:	51025				
Prep Date:	5/2/2018		Analysis Date:	5/3/2018		SeqNo:	1656816		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids	ND	20.0									

Sample ID	LCS-37915		SampType:	LCS		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	LCSW		Batch ID:	37915		RunNo:	51025				
Prep Date:	5/2/2018		Analysis Date:	5/3/2018		SeqNo:	1656817		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids	1010	20.0	1000	0	101	80	120				

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1805099

RcptNo: 1

Received By: Isaiah Ortiz

5/2/2018 9:20:00 AM

*IO*

Completed By: Michelle Garcia

5/2/2018 10:21:22 AM

*Michelle Garcia*

Reviewed By:

*ENM*

*5/2/18*

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

## Log In

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

# of preserved bottles checked for pH: 4  
(2 or  $>12$  unless noted)  
Adjusted? YES  
Checked by: IMO

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks: *Added 0.4mL HNO<sub>3</sub> to samples for metals analysis. Held 24 hours prior analysis.*

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			<i>IMO</i>





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

May 08, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario

OrderNo.: 1805223

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 11 sample(s) on 5/3/2018 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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805223**Date Reported: **5/8/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** L10-3**Project:** Candelario**Collection Date:** 5/1/2018 1:38:00 PM**Lab ID:** 1805223-001**Matrix:** SOIL**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	4900	150		mg/Kg	100	5/4/2018 1:58:13 PM	37943
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/4/2018 9:28:49 AM	37940
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/4/2018 9:28:49 AM	37940
Surr: DNOP	124	70-130		%Rec	1	5/4/2018 9:28:49 AM	37940
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	5/4/2018 10:14:08 AM	H51049
Surr: BFB	93.1	15-316		%Rec	1	5/4/2018 10:14:08 AM	H51049
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	5/4/2018 10:14:08 AM	B51049
Toluene	ND	0.040		mg/Kg	1	5/4/2018 10:14:08 AM	B51049
Ethylbenzene	ND	0.040		mg/Kg	1	5/4/2018 10:14:08 AM	B51049
Xylenes, Total	ND	0.079		mg/Kg	1	5/4/2018 10:14:08 AM	B51049
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	5/4/2018 10:14:08 AM	B51049

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**Date Reported: **5/8/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** L11-2**Project:** Candelario**Collection Date:** 5/1/2018 1:59:00 PM**Lab ID:** 1805223-002**Matrix:** SOIL**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	3800	150		mg/Kg	100	5/4/2018 2:10:37 PM	37943
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	23	9.4		mg/Kg	1	5/4/2018 9:50:43 AM	37940
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/4/2018 9:50:43 AM	37940
Surr: DNOP	108	70-130		%Rec	1	5/4/2018 9:50:43 AM	37940
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	5/4/2018 10:37:24 AM	H51049
Surr: BFB	93.1	15-316		%Rec	1	5/4/2018 10:37:24 AM	H51049
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.016		mg/Kg	1	5/4/2018 10:37:24 AM	B51049
Toluene	ND	0.032		mg/Kg	1	5/4/2018 10:37:24 AM	B51049
Ethylbenzene	ND	0.032		mg/Kg	1	5/4/2018 10:37:24 AM	B51049
Xylenes, Total	ND	0.063		mg/Kg	1	5/4/2018 10:37:24 AM	B51049
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/4/2018 10:37:24 AM	B51049

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**

Date Reported: **5/8/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L12-2

**Project:** Candelario

**Collection Date:** 5/1/2018 2:23:00 PM

**Lab ID:** 1805223-003

**Matrix:** SOIL

**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	8800	300		mg/Kg	200	5/4/2018 2:23:02 PM	37943
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/4/2018 10:12:53 AM	37940
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/4/2018 10:12:53 AM	37940
Surr: DNOP	109	70-130		%Rec	1	5/4/2018 10:12:53 AM	37940
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	5/4/2018 11:00:36 AM	H51049
Surr: BFB	91.9	15-316		%Rec	1	5/4/2018 11:00:36 AM	H51049
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.016		mg/Kg	1	5/4/2018 11:00:36 AM	B51049
Toluene	ND	0.032		mg/Kg	1	5/4/2018 11:00:36 AM	B51049
Ethylbenzene	ND	0.032		mg/Kg	1	5/4/2018 11:00:36 AM	B51049
Xylenes, Total	ND	0.065		mg/Kg	1	5/4/2018 11:00:36 AM	B51049
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/4/2018 11:00:36 AM	B51049

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**

Date Reported: **5/8/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L13-2

**Project:** Candelario

**Collection Date:** 5/1/2018 2:53:00 PM

**Lab ID:** 1805223-004

**Matrix:** SOIL

**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	5800	300		mg/Kg	200	5/4/2018 2:35:26 PM	37943
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/4/2018 10:34:58 AM	37940
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/4/2018 10:34:58 AM	37940
Surr: DNOP	108	70-130		%Rec	1	5/4/2018 10:34:58 AM	37940
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	5/4/2018 11:23:48 AM	H51049
Surr: BFB	92.5	15-316		%Rec	1	5/4/2018 11:23:48 AM	H51049
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	5/4/2018 11:23:48 AM	B51049
Toluene	ND	0.040		mg/Kg	1	5/4/2018 11:23:48 AM	B51049
Ethylbenzene	ND	0.040		mg/Kg	1	5/4/2018 11:23:48 AM	B51049
Xylenes, Total	ND	0.080		mg/Kg	1	5/4/2018 11:23:48 AM	B51049
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	5/4/2018 11:23:48 AM	B51049

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**

Date Reported: **5/8/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW23

**Project:** Candelario

**Collection Date:** 5/1/2018 1:05:00 PM

**Lab ID:** 1805223-005

**Matrix:** SOIL

**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	760	30		mg/Kg	20	5/3/2018 7:08:16 PM	37943
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	700	9.9		mg/Kg	1	5/4/2018 10:57:06 AM	37940
Motor Oil Range Organics (MRO)	420	49		mg/Kg	1	5/4/2018 10:57:06 AM	37940
Surr: DNOP	105	70-130		%Rec	1	5/4/2018 10:57:06 AM	37940
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/4/2018 11:47:01 AM	H51049
Surr: BFB	96.1	15-316		%Rec	1	5/4/2018 11:47:01 AM	H51049
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	5/4/2018 11:47:01 AM	B51049
Toluene	ND	0.038		mg/Kg	1	5/4/2018 11:47:01 AM	B51049
Ethylbenzene	ND	0.038		mg/Kg	1	5/4/2018 11:47:01 AM	B51049
Xylenes, Total	ND	0.077		mg/Kg	1	5/4/2018 11:47:01 AM	B51049
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/4/2018 11:47:01 AM	B51049

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**Date Reported: **5/8/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** SW25**Project:** Candelario**Collection Date:** 5/1/2018 1:15:00 PM**Lab ID:** 1805223-006**Matrix:** SOIL**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	630	30		mg/Kg	20	5/3/2018 7:20:40 PM	37943
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	5/4/2018 10:11:35 AM	B51051
Surr: BFB	117	70-130		%Rec	1	5/4/2018 10:11:35 AM	B51051
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	12	9.7		mg/Kg	1	5/4/2018 11:41:12 AM	37940
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/4/2018 11:41:12 AM	37940
Surr: DNOP	118	70-130		%Rec	1	5/4/2018 11:41:12 AM	37940
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	0.018		mg/Kg	1	5/4/2018 10:11:35 AM	A51051
Toluene	ND	0.035		mg/Kg	1	5/4/2018 10:11:35 AM	A51051
Ethylbenzene	ND	0.035		mg/Kg	1	5/4/2018 10:11:35 AM	A51051
Xylenes, Total	ND	0.070		mg/Kg	1	5/4/2018 10:11:35 AM	A51051
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	5/4/2018 10:11:35 AM	A51051
Surr: Toluene-d8	90.4	70-130		%Rec	1	5/4/2018 10:11:35 AM	A51051

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**

Date Reported: **5/8/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW1

**Project:** Candelario

**Collection Date:** 5/1/2018 11:30:00 AM

**Lab ID:** 1805223-007

**Matrix:** SOIL

**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	890	30		mg/Kg	20	5/3/2018 7:33:04 PM	37943
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	5/4/2018 10:34:41 AM	B51051
Surr: BFB	117	70-130		%Rec	1	5/4/2018 10:34:41 AM	B51051
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	34	9.8		mg/Kg	1	5/4/2018 12:03:15 PM	37940
Motor Oil Range Organics (MRO)	50	49		mg/Kg	1	5/4/2018 12:03:15 PM	37940
Surr: DNOP	110	70-130		%Rec	1	5/4/2018 12:03:15 PM	37940
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	0.017		mg/Kg	1	5/4/2018 10:34:41 AM	A51051
Toluene	ND	0.035		mg/Kg	1	5/4/2018 10:34:41 AM	A51051
Ethylbenzene	ND	0.035		mg/Kg	1	5/4/2018 10:34:41 AM	A51051
Xylenes, Total	ND	0.069		mg/Kg	1	5/4/2018 10:34:41 AM	A51051
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	5/4/2018 10:34:41 AM	A51051
Surr: Toluene-d8	89.9	70-130		%Rec	1	5/4/2018 10:34:41 AM	A51051

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**

Date Reported: **5/8/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW4

**Project:** Candelario

**Collection Date:** 5/1/2018 12:11:00 PM

**Lab ID:** 1805223-008

**Matrix:** SOIL

**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	5200	300		mg/Kg	200	5/4/2018 2:47:51 PM	37943
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	11	3.4		mg/Kg	1	5/4/2018 10:57:48 AM	B51051
Surr: BFB	109	70-130		%Rec	1	5/4/2018 10:57:48 AM	B51051
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	520	9.1		mg/Kg	1	5/4/2018 12:25:26 PM	37940
Motor Oil Range Organics (MRO)	370	45		mg/Kg	1	5/4/2018 12:25:26 PM	37940
Surr: DNOP	131	70-130	S	%Rec	1	5/4/2018 12:25:26 PM	37940
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	0.017		mg/Kg	1	5/4/2018 10:57:48 AM	A51051
Toluene	ND	0.034		mg/Kg	1	5/4/2018 10:57:48 AM	A51051
Ethylbenzene	ND	0.034		mg/Kg	1	5/4/2018 10:57:48 AM	A51051
Xylenes, Total	ND	0.068		mg/Kg	1	5/4/2018 10:57:48 AM	A51051
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	5/4/2018 10:57:48 AM	A51051
Surr: Toluene-d8	92.3	70-130		%Rec	1	5/4/2018 10:57:48 AM	A51051

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**Date Reported: **5/8/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** SW7**Project:** Candelario**Collection Date:** 5/1/2018 12:58:00 PM**Lab ID:** 1805223-009**Matrix:** SOIL**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	840	30		mg/Kg	20	5/3/2018 7:57:52 PM	37943
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	5/4/2018 12:30:23 PM	B51051
Surr: BFB	120	70-130		%Rec	1	5/4/2018 12:30:23 PM	B51051
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/4/2018 1:09:28 PM	37940
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/4/2018 1:09:28 PM	37940
Surr: DNOP	113	70-130		%Rec	1	5/4/2018 1:09:28 PM	37940
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	0.017		mg/Kg	1	5/4/2018 11:21:03 AM	A51051
Toluene	ND	0.035		mg/Kg	1	5/4/2018 11:21:03 AM	A51051
Ethylbenzene	ND	0.035		mg/Kg	1	5/4/2018 11:21:03 AM	A51051
Xylenes, Total	ND	0.069		mg/Kg	1	5/4/2018 11:21:03 AM	A51051
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	5/4/2018 11:21:03 AM	A51051
Surr: Toluene-d8	90.5	70-130		%Rec	1	5/4/2018 11:21:03 AM	A51051

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**

Date Reported: **5/8/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW11

**Project:** Candelario

**Collection Date:** 5/1/2018 12:45:00 PM

**Lab ID:** 1805223-010

**Matrix:** SOIL

**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	420	30		mg/Kg	20	5/3/2018 8:10:17 PM	37943
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	5/4/2018 11:44:14 AM	B51051
Surr: BFB	117	70-130		%Rec	1	5/4/2018 11:44:14 AM	B51051
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	5/4/2018 1:31:26 PM	37940
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/4/2018 1:31:26 PM	37940
Surr: DNOP	94.3	70-130		%Rec	1	5/4/2018 1:31:26 PM	37940
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	0.016		mg/Kg	1	5/4/2018 11:44:14 AM	A51051
Toluene	ND	0.033		mg/Kg	1	5/4/2018 11:44:14 AM	A51051
Ethylbenzene	ND	0.033		mg/Kg	1	5/4/2018 11:44:14 AM	A51051
Xylenes, Total	ND	0.066		mg/Kg	1	5/4/2018 11:44:14 AM	A51051
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	5/4/2018 11:44:14 AM	A51051
Surr: Toluene-d8	88.2	70-130		%Rec	1	5/4/2018 11:44:14 AM	A51051

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805223**Date Reported: **5/8/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** SW5**Project:** Candelario**Collection Date:** 5/1/2018 12:15:00 PM**Lab ID:** 1805223-011**Matrix:** SOIL**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	75		mg/Kg	50	5/4/2018 3:00:15 PM	37943
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	5/4/2018 12:07:21 PM	B51051
Surr: BFB	118	70-130		%Rec	1	5/4/2018 12:07:21 PM	B51051
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	840	9.1		mg/Kg	1	5/4/2018 1:53:31 PM	37940
Motor Oil Range Organics (MRO)	630	46		mg/Kg	1	5/4/2018 1:53:31 PM	37940
Surr: DNOP	109	70-130		%Rec	1	5/4/2018 1:53:31 PM	37940
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	0.017		mg/Kg	1	5/4/2018 12:07:21 PM	A51051
Toluene	ND	0.035		mg/Kg	1	5/4/2018 12:07:21 PM	A51051
Ethylbenzene	ND	0.035		mg/Kg	1	5/4/2018 12:07:21 PM	A51051
Xylenes, Total	ND	0.070		mg/Kg	1	5/4/2018 12:07:21 PM	A51051
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	5/4/2018 12:07:21 PM	A51051
Surr: Toluene-d8	82.3	70-130		%Rec	1	5/4/2018 12:07:21 PM	A51051

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805223

08-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario

Sample ID	MB-37943		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 37943		RunNo: 51018					
Prep Date:	5/3/2018		Analysis Date: 5/3/2018		SeqNo: 1657499		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-37943		SampType:	lcs		TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSS		Batch ID:	37943		RunNo:	51018				
Prep Date:	5/3/2018		Analysis Date:	5/3/2018		SeqNo:	1657500		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	93.4	90	110				

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805223

08-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario

Sample ID	LCS-37940		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 37940		RunNo: 51045					
Prep Date:	5/3/2018		Analysis Date: 5/4/2018		SeqNo: 1657933		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.4	70	130			
Surr: DNOP	5.2		5.000		105	70	130			

Sample ID	MB-37940	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID:	PBS	Batch ID: 37940		RunNo: 51045						
Prep Date:	5/3/2018	Analysis Date: 5/4/2018		SeqNo: 1657934		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	12		10.00		119	70	130			

Sample ID	1805223-001AMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	L10-3		Batch ID: 37940		RunNo: 51045					
Prep Date:	5/3/2018		Analysis Date: 5/4/2018		SeqNo: 1657957		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.8	49.16	0	90.6	55.8	125			
Surr: DNOP	5.3		4.916		108	70	130			

Sample ID	1805223-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	L10-3		Batch ID:	37940		RunNo:	51045				
Prep Date:	5/3/2018		Analysis Date:	5/4/2018		SeqNo:	1658018		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	45	9.7	48.40	0	93.3	55.8	125	1.44	20		
Surr: DNOP	5.3		4.840		110	70	130	0	0		

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805223

08-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario

Sample ID	RB-II	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	H51049	RunNo:	51049					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658237	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	950		1000		95.0	15	316			

Sample ID	2.5UG GRO LCS-II	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	H51049	RunNo:	51049					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658238	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	108	75.9	131			
Surr: BFB	1100		1000		107	15	316			

Sample ID	1805223-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	L10-3	Batch ID:	H51049	RunNo:	51049					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658239	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.0	19.76	0	100	77.8	128			
Surr: BFB	800		790.5		102	15	316			

Sample ID	1805223-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	L10-3	Batch ID:	H51049	RunNo:	51049					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658240	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.0	19.76	0	99.9	77.8	128	0.320	20	
Surr: BFB	790		790.5		100	15	316	0	0	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805223

08-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario

Sample ID <b>RB</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>B51049</b>		RunNo: <b>51049</b>							
Prep Date:	Analysis Date: <b>5/4/2018</b>		SeqNo: <b>1658252</b>		Units: <b>mg/Kg</b>					
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	1.0		1.000		105	80	120			

Sample ID <b>100NG BTEX LCS</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>B51049</b>		RunNo: <b>51049</b>							
Prep Date:	Analysis Date: <b>5/4/2018</b>		SeqNo: <b>1658253</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	99.9	77.3	128			
Toluene	1.0	0.050	1.000	0	102	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	101	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	103	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID <b>1805223-002AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>L11-2</b>	Batch ID: <b>B51049</b>		RunNo: <b>51049</b>							
Prep Date:	Analysis Date: <b>5/4/2018</b>		SeqNo: <b>1658254</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.62	0.016	0.6321	0	97.7	68.5	133			
Toluene	0.63	0.032	0.6321	0	99.3	75	130			
Ethylbenzene	0.63	0.032	0.6321	0	99.0	79.4	128			
Xylenes, Total	1.9	0.063	1.896	0	101	77.3	131			
Surr: 4-Bromofluorobenzene	0.66		0.6321		105	80	120			

Sample ID <b>1805223-002AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>L11-2</b>	Batch ID: <b>B51049</b>		RunNo: <b>51049</b>							
Prep Date:	Analysis Date: <b>5/4/2018</b>		SeqNo: <b>1658255</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.61	0.016	0.6321	0	96.8	68.5	133	0.884	20	
Toluene	0.62	0.032	0.6321	0	98.6	75	130	0.667	20	
Ethylbenzene	0.61	0.032	0.6321	0	96.6	79.4	128	2.49	20	
Xylenes, Total	1.9	0.063	1.896	0	99.0	77.3	131	1.90	20	
Surr: 4-Bromofluorobenzene	0.67		0.6321		107	80	120	0	0	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805223

08-May-18

**Client:** Souder, Miller & Associates

**Project:** Candelario

Sample ID <b>100ng lcs</b>	SampType: <b>LCS4</b>			TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>A51051</b>			RunNo: <b>51051</b>						
Prep Date:	Analysis Date: <b>5/4/2018</b>			SeqNo: <b>1658036</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.7	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.9	70	130			
Surr: Toluene-d8	0.49		0.5000		97.4	70	130			

Sample ID <b>rb</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>PBS</b>	Batch ID: <b>A51051</b>			RunNo: <b>51051</b>						
Prep Date:	Analysis Date: <b>5/4/2018</b>			SeqNo: <b>1658045</b>		Units: <b>mg/Kg</b>				
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	0.61		0.5000		121	70	130			
Surr: Toluene-d8	0.49		0.5000		98.7	70	130			

Sample ID <b>1805223-007ams</b>	SampType: <b>MS4</b>			TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>SW1</b>	Batch ID: <b>A51051</b>			RunNo: <b>51051</b>						
Prep Date:	Analysis Date: <b>5/4/2018</b>			SeqNo: <b>1658665</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.59	0.017	0.6911	0	85.8	80	120			
Toluene	0.67	0.035	0.6911	0.005453	95.6	80	120			
Ethylbenzene	0.74	0.035	0.6911	0	106	80	120			
Xylenes, Total	2.2	0.069	2.073	0.01633	104	80	120			
Surr: 4-Bromofluorobenzene	0.38		0.3456		111	70	130			
Surr: Toluene-d8	0.32		0.3456		91.6	70	130			

Sample ID <b>1805223-007amsd</b>	SampType: <b>MSD4</b>			TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>SW1</b>	Batch ID: <b>A51051</b>			RunNo: <b>51051</b>						
Prep Date:	Analysis Date: <b>5/4/2018</b>			SeqNo: <b>1658666</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.54	0.017	0.6911	0	77.8	80	120	9.73	0	S
Toluene	0.68	0.035	0.6911	0.005453	97.8	80	120	2.20	0	
Ethylbenzene	0.71	0.035	0.6911	0	103	80	120	3.17	0	
Xylenes, Total	2.1	0.069	2.073	0.01633	102	80	120	2.40	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 Quantitative 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#: 1805223

08-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario

Sample ID	1805223-007amsd	SampType:	MSD4	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SW1	Batch ID:	A51051	RunNo:	51051					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658666	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.38		0.3456		110	70	130	0	0	
Surr: Toluene-d8	0.32		0.3456		93.3	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 Quantitative 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#: 1805223

08-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	B51051	RunNo:	51051					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658033	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.5	70	130			
Surr: BFB	480		500.0		95.5	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	B51051	RunNo:	51051					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658034	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	560		500.0		111	70	130			

Sample ID	1805223-006ams	SampType:	MS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	SW25	Batch ID:	B51051	RunNo:	51051					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658644	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.3	21.30	0	95.7	64.7	142			
Surr: BFB	440		425.9		103	70	130			

Sample ID	1805223-006amsd	SampType:	MSD	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	SW25	Batch ID:	B51051	RunNo:	51051					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1658645	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.3	21.30	0	92.2	64.7	142	3.70	20	
Surr: BFB	460		425.9		109	70	130	0	0	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



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-CARLSBAD

Work Order Number: 1805223

RcptNo: 1

Received By: Isaiah Ortiz 5/3/2018 9:30:00 AM

Completed By: Anne Thorne 5/3/2018 11:55:45 AM

Reviewed By: IHO 5/3/18

Labeled by: LK 5/3/18

IC

Anne Thorne

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

### Log In

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

# of preserved  
bottles checked  
for pH:

( $\leq 2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

LK 5/3/18

### Special Handling (if applicable)

15. 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: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			





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

May 04, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario Em Res

OrderNo.: 1805229

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/3/2018 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](http://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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805229**Date Reported: **5/4/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** Downstream**Project:** Candelario Em Res**Collection Date:** 5/1/2018 11:00:00 AM**Lab ID:** 1805229-001**Matrix:** AQUEOUS**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1300	50	*	mg/L	100	5/3/2018 3:18:14 PM	R51040
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/3/2018 2:28:09 PM	A51035
Surr: BFB	103	70-130		%Rec	1	5/3/2018 2:28:09 PM	A51035
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/4/2018 1:02:03 AM	37933
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/4/2018 1:02:03 AM	37933
Surr: DNOP	122	76.7-135		%Rec	1	5/4/2018 1:02:03 AM	37933
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/3/2018 2:28:09 PM	C51035
Toluene	ND	1.0		µg/L	1	5/3/2018 2:28:09 PM	C51035
Ethylbenzene	ND	1.0		µg/L	1	5/3/2018 2:28:09 PM	C51035
Xylenes, Total	ND	1.5		µg/L	1	5/3/2018 2:28:09 PM	C51035
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	1	5/3/2018 2:28:09 PM	C51035
Surr: Toluene-d8	92.6	70-130		%Rec	1	5/3/2018 2:28:09 PM	C51035

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805229**Date Reported: **5/4/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** POE #2**Project:** Candelario Em Res**Collection Date:** 5/1/2018 10:35:00 AM**Lab ID:** 1805229-002**Matrix:** AQUEOUS**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/3/2018 3:43:56 PM	R51040
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/3/2018 5:56:17 PM	A51035
Surr: BFB	104	70-130		%Rec	1	5/3/2018 5:56:17 PM	A51035
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/4/2018 1:24:02 AM	37933
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/4/2018 1:24:02 AM	37933
Surr: DNOP	130	76.7-135		%Rec	1	5/4/2018 1:24:02 AM	37933
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/3/2018 5:56:17 PM	C51035
Toluene	ND	1.0		µg/L	1	5/3/2018 5:56:17 PM	C51035
Ethylbenzene	ND	1.0		µg/L	1	5/3/2018 5:56:17 PM	C51035
Xylenes, Total	ND	1.5		µg/L	1	5/3/2018 5:56:17 PM	C51035
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	5/3/2018 5:56:17 PM	C51035
Surr: Toluene-d8	94.9	70-130		%Rec	1	5/3/2018 5:56:17 PM	C51035

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805229**Date Reported: **5/4/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** POE #1**Project:** Candelario Em Res**Collection Date:** 5/1/2018 10:10:00 AM**Lab ID:** 1805229-003**Matrix:** AQUEOUS**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1100	50	*	mg/L	100	5/3/2018 4:09:41 PM	R51040
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/3/2018 6:19:27 PM	A51035
Surr: BFB	104	70-130		%Rec	1	5/3/2018 6:19:27 PM	A51035
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/4/2018 1:45:58 AM	37933
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/4/2018 1:45:58 AM	37933
Surr: DNOP	130	76.7-135		%Rec	1	5/4/2018 1:45:58 AM	37933
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/3/2018 6:19:27 PM	C51035
Toluene	ND	1.0		µg/L	1	5/3/2018 6:19:27 PM	C51035
Ethylbenzene	ND	1.0		µg/L	1	5/3/2018 6:19:27 PM	C51035
Xylenes, Total	ND	1.5		µg/L	1	5/3/2018 6:19:27 PM	C51035
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	5/3/2018 6:19:27 PM	C51035
Surr: Toluene-d8	95.5	70-130		%Rec	1	5/3/2018 6:19:27 PM	C51035

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 9
	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 Quantitative 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.

## Analytical Report

Lab Order **1805229**

Date Reported: **5/4/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** POE #1

**Project:** Candelario Em Res

**Collection Date:** 5/1/2018 5:00:00 PM

**Lab ID:** 1805229-004

**Matrix:** AQUEOUS

**Received Date:** 5/3/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/3/2018 4:35:24 PM	R51040
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/3/2018 6:42:37 PM	A51035
Surr: BFB	99.5	70-130		%Rec	1	5/3/2018 6:42:37 PM	A51035
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/4/2018 2:07:54 AM	37933
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/4/2018 2:07:54 AM	37933
Surr: DNOP	137	76.7-135	S	%Rec	1	5/4/2018 2:07:54 AM	37933
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/3/2018 6:42:37 PM	C51035
Toluene	ND	1.0		µg/L	1	5/3/2018 6:42:37 PM	C51035
Ethylbenzene	ND	1.0		µg/L	1	5/3/2018 6:42:37 PM	C51035
Xylenes, Total	ND	1.5		µg/L	1	5/3/2018 6:42:37 PM	C51035
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	5/3/2018 6:42:37 PM	C51035
Surr: Toluene-d8	92.6	70-130		%Rec	1	5/3/2018 6:42:37 PM	C51035

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805229

04-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario Em Res

Sample ID <b>MB</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R51040</b>		RunNo: <b>51040</b>							
Prep Date:	Analysis Date: <b>5/3/2018</b>		SeqNo: <b>1657292</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID <b>LCS</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R51040</b>		RunNo: <b>51040</b>							
Prep Date:	Analysis Date: <b>5/3/2018</b>		SeqNo: <b>1657293</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.5	0.50	5.000	0	90.6	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805229

04-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario Em Res

Sample ID	LCS-37932			SampType:	LCS			TestCode:	EPA Method 8015M/D: Diesel Range		
Client ID:	LCSW			Batch ID:	37932			RunNo:	50978		
Prep Date:	5/3/2018			Analysis Date:	5/3/2018			SeqNo:	1656856      Units: %Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	0.56		0.5000		112	76.7	135				

Sample ID	MB-37932		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 37932		RunNo: 50978					
Prep Date:	5/3/2018		Analysis Date: 5/3/2018		SeqNo: 1656857		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	1.2		1.000		117	76.7	135			

Sample ID	LCS-37933		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range				
Client ID:	LCSW		Batch ID:	37933		RunNo:	50978				
Prep Date:	5/3/2018		Analysis Date:	5/4/2018		SeqNo:	1657026		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	5.3	1.0	5.000	0	106	70	130				
Surr: DNOP	0.60		0.5000		119	76.7	135				

Sample ID	MB-37933		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 37933		RunNo: 50978					
Prep Date:	5/3/2018		Analysis Date: 5/4/2018		SeqNo: 1657027		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		121	76.7	135			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805229

04-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario Em Res

Sample ID	100ng lcs	SampType:	LCS4	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	BatchQC	Batch ID:	C51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657258	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.4	80	120			
Toluene	20	1.0	20.00	0	99.4	80	120			
Ethylbenzene	20	1.0	20.00	0	102	80	120			
Xylenes, Total	60	1.5	60.00	0	100	80	120			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.3	70	130			
Surr: Toluene-d8	9.5		10.00		95.5	70	130			

Sample ID	1805229-003ams	SampType:	MS4	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	POE #1	Batch ID:	C51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657266	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.2	80	120			
Toluene	21	1.0	20.00	0.06700	103	80	120			
Ethylbenzene	21	1.0	20.00	0	104	80	120			
Xylenes, Total	61	1.5	60.00	0.5020	101	80	120			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.9	70	130			
Surr: Toluene-d8	9.7		10.00		97.2	70	130			

Sample ID	1805229-003amsd	SampType:	MSD4	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	POE #1	Batch ID:	C51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657267	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	80	120	3.17	20	
Toluene	20	1.0	20.00	0.06700	100	80	120	2.87	20	
Ethylbenzene	20	1.0	20.00	0	102	80	120	2.20	20	
Xylenes, Total	60	1.5	60.00	0.5020	98.8	80	120	2.37	20	
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.3	70	130	0	0	

Sample ID	rb2	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	C51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657269	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								

### 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 Quantitative 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#: 1805229

04-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario Em Res

Sample ID	rb2	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	C51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657269	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	11		10.00		114	70	130			
Surr: Toluene-d8	9.7		10.00		96.7	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 Quantitative 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#: 1805229

04-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario Em Res

Sample ID	1805229-002ams	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	POE #2	Batch ID:	A51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657123	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	89.4	70	130			
Surr: BFB	9.5		10.00		95.3	70	130			

Sample ID	1805229-002amsd	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	POE #2	Batch ID:	A51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/4/2018	SeqNo:	1657124	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.44	0.050	0.5000	0	87.9	70	130	1.71	20	
Surr: BFB	9.2		10.00		92.2	70	130	0	0	

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	A51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657127	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	70	130			
Surr: BFB	9.5		10.00		95.2	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	A51035	RunNo:	51035					
Prep Date:		Analysis Date:	5/3/2018	SeqNo:	1657128	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	10		10.00		102	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



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-CARLSBAD

Work Order Number: 1805229

RcptNo: 1

Received By: Isaiah Ortiz 5/3/2018 9:30:00 AM

Completed By: Anne Thorne 5/3/2018 12:36:07 PM

Reviewed By: *my*

*05/03/18*  
*Labeled by K 05/03/18 @ 1300*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐

4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐

5. Sample(s) in proper container(s)? Yes ☒ No ☐

6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐

7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐

8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐

9. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐

10. Were any sample containers received broken? Yes ☐ No ☒

11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐

13. Is it clear what analyses were requested? Yes ☒ No ☐

14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

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

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

### Special Handling (if applicable)

15. 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: \_\_\_\_\_

16. Additional remarks:

*pour'd off POE#1 @ 1700 DRO Amber into a 120 vials plus  
for CI analysis / A-05/03/18*

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			

**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com  
4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

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 ( $F^-$ , $Cl^-$ , $NO_3^-$ , $NO_2^-$ , $PO_4^{3-}$ , $SO_4^{2-}$ )
8081 Pesticides / 8082 PCB's
8260B (VOA)
8270 (Semi-VOA)
<del>XXXXXXXXXXXXXX</del>
Air Bubbles (Y or N)

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 ( $F^{-}$ , $Cl^{-}$ , $NO_3^{-}$ , $NO_2^{-}$ , $PO_4^{3-}$ , $SO_4^{2-}$ )
8081 Pesticides / 8082 PCB's
8260B (VOA)
8270 (Semi-VOA)
<del>XXXXXXXXXXXXXX</del>
Air Bubbles (Y or N)

BTEX + MTI	X	X	X	X					
BTEX + MTI	X	X	X	X					
TPH 8015B	X	X	X	X					
TPH (Metho)									
EDB (Metho)									
PAH's (8310)									
RCRA 8 Me									
Anions (F/c)	X	X	X	X					
8081 Pestic									
8260B (VOA)									
8270 (Semi-									
<del>XXXXXXXXXX</del>									
Air Bubbles									

[illegible]

Remarks:  
4 bags total  
~~full 1977~~, 70H & BTEX on all 4  
AS 05/03/18  
See A-100 1A 05/03/18

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  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 18, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario EMR

OrderNo.: 1805497

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 16 sample(s) on 5/9/2018 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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW24

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 1:29:00 PM

**Lab ID:** 1805497-001

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	220	30		mg/Kg	20	5/15/2018 10:21:51 AM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	71	9.9		mg/Kg	1	5/13/2018 5:47:16 PM	38039
Motor Oil Range Organics (MRO)	89	50		mg/Kg	1	5/13/2018 5:47:16 PM	38039
Surr: DNOP	108	70-130		%Rec	1	5/13/2018 5:47:16 PM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/10/2018 8:36:51 PM	38023
Surr: BFB	79.9	15-316		%Rec	1	5/10/2018 8:36:51 PM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	5/10/2018 8:36:51 PM	38023
Benzene	ND	0.024		mg/Kg	1	5/10/2018 8:36:51 PM	38023
Toluene	ND	0.049		mg/Kg	1	5/10/2018 8:36:51 PM	38023
Ethylbenzene	ND	0.049		mg/Kg	1	5/10/2018 8:36:51 PM	38023
Xylenes, Total	ND	0.097		mg/Kg	1	5/10/2018 8:36:51 PM	38023
Surr: 4-Bromofluorobenzene	96.9	80-120		%Rec	1	5/10/2018 8:36:51 PM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW10

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 12:41:00 PM

**Lab ID:** 1805497-002

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1100	30		mg/Kg	20	5/15/2018 11:23:53 AM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/12/2018 3:13:06 AM	38039
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/12/2018 3:13:06 AM	38039
Surr: DNOP	105	70-130		%Rec	1	5/12/2018 3:13:06 AM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/10/2018 9:00:27 PM	38023
Surr: BFB	82.6	15-316		%Rec	1	5/10/2018 9:00:27 PM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	5/10/2018 9:00:27 PM	38023
Benzene	ND	0.023		mg/Kg	1	5/10/2018 9:00:27 PM	38023
Toluene	ND	0.046		mg/Kg	1	5/10/2018 9:00:27 PM	38023
Ethylbenzene	ND	0.046		mg/Kg	1	5/10/2018 9:00:27 PM	38023
Xylenes, Total	ND	0.092		mg/Kg	1	5/10/2018 9:00:27 PM	38023
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	5/10/2018 9:00:27 PM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**Date Reported: **5/18/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** SW14**Project:** Candelario EMR**Collection Date:** 5/1/2018 12:53:00 PM**Lab ID:** 1805497-003**Matrix:** SOIL**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1700	75		mg/Kg	50	5/16/2018 10:39:07 AM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	26	10		mg/Kg	1	5/15/2018 5:01:11 AM	38039
Motor Oil Range Organics (MRO)	79	50		mg/Kg	1	5/15/2018 5:01:11 AM	38039
Surr: DNOP	115	70-130		%Rec	1	5/15/2018 5:01:11 AM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/10/2018 9:23:45 PM	38023
Surr: BFB	83.2	15-316		%Rec	1	5/10/2018 9:23:45 PM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	5/10/2018 9:23:45 PM	38023
Benzene	ND	0.023		mg/Kg	1	5/10/2018 9:23:45 PM	38023
Toluene	ND	0.047		mg/Kg	1	5/10/2018 9:23:45 PM	38023
Ethylbenzene	ND	0.047		mg/Kg	1	5/10/2018 9:23:45 PM	38023
Xylenes, Total	ND	0.094		mg/Kg	1	5/10/2018 9:23:45 PM	38023
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/10/2018 9:23:45 PM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW9

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 12:37:00 PM

**Lab ID:** 1805497-004

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1100	30		mg/Kg	20	5/15/2018 11:48:43 AM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/12/2018 3:57:42 AM	38039
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/12/2018 3:57:42 AM	38039
Surr: DNOP	98.0	70-130		%Rec	1	5/12/2018 3:57:42 AM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/10/2018 9:47:18 PM	38023
Surr: BFB	90.4	15-316		%Rec	1	5/10/2018 9:47:18 PM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	5/10/2018 9:47:18 PM	38023
Benzene	ND	0.024		mg/Kg	1	5/10/2018 9:47:18 PM	38023
Toluene	ND	0.048		mg/Kg	1	5/10/2018 9:47:18 PM	38023
Ethylbenzene	ND	0.048		mg/Kg	1	5/10/2018 9:47:18 PM	38023
Xylenes, Total	ND	0.097		mg/Kg	1	5/10/2018 9:47:18 PM	38023
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/10/2018 9:47:18 PM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW8

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 12:32:00 PM

**Lab ID:** 1805497-005

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1300	75		mg/Kg	50	5/16/2018 10:51:31 AM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	26	10		mg/Kg	1	5/12/2018 4:19:54 AM	38039
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/12/2018 4:19:54 AM	38039
Surr: DNOP	98.2	70-130		%Rec	1	5/12/2018 4:19:54 AM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/10/2018 10:10:32 PM	38023
Surr: BFB	83.8	15-316		%Rec	1	5/10/2018 10:10:32 PM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	5/10/2018 10:10:32 PM	38023
Benzene	ND	0.024		mg/Kg	1	5/10/2018 10:10:32 PM	38023
Toluene	ND	0.047		mg/Kg	1	5/10/2018 10:10:32 PM	38023
Ethylbenzene	ND	0.047		mg/Kg	1	5/10/2018 10:10:32 PM	38023
Xylenes, Total	ND	0.095		mg/Kg	1	5/10/2018 10:10:32 PM	38023
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/10/2018 10:10:32 PM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW3

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 12:09:00 PM

**Lab ID:** 1805497-006

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	460	30		mg/Kg	20	5/15/2018 12:13:32 PM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	42	9.9		mg/Kg	1	5/12/2018 4:42:15 AM	38039
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/12/2018 4:42:15 AM	38039
Surr: DNOP	97.7	70-130		%Rec	1	5/12/2018 4:42:15 AM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/10/2018 10:33:55 PM	38023
Surr: BFB	81.8	15-316		%Rec	1	5/10/2018 10:33:55 PM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	5/10/2018 10:33:55 PM	38023
Benzene	ND	0.025		mg/Kg	1	5/10/2018 10:33:55 PM	38023
Toluene	ND	0.049		mg/Kg	1	5/10/2018 10:33:55 PM	38023
Ethylbenzene	ND	0.049		mg/Kg	1	5/10/2018 10:33:55 PM	38023
Xylenes, Total	ND	0.099		mg/Kg	1	5/10/2018 10:33:55 PM	38023
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	5/10/2018 10:33:55 PM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW20

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 1:15:00 PM

**Lab ID:** 1805497-007

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	3900	150		mg/Kg	100	5/16/2018 11:03:56 AM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	160	9.9		mg/Kg	1	5/13/2018 6:32:18 PM	38039
Motor Oil Range Organics (MRO)	160	49		mg/Kg	1	5/13/2018 6:32:18 PM	38039
Surr: DNOP	109	70-130		%Rec	1	5/13/2018 6:32:18 PM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/10/2018 10:57:28 PM	38023
Surr: BFB	86.7	15-316		%Rec	1	5/10/2018 10:57:28 PM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	5/10/2018 10:57:28 PM	38023
Benzene	ND	0.025		mg/Kg	1	5/10/2018 10:57:28 PM	38023
Toluene	ND	0.050		mg/Kg	1	5/10/2018 10:57:28 PM	38023
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2018 10:57:28 PM	38023
Xylenes, Total	ND	0.099		mg/Kg	1	5/10/2018 10:57:28 PM	38023
Surr: 4-Bromofluorobenzene	96.7	80-120		%Rec	1	5/10/2018 10:57:28 PM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW26

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 1:32:00 PM

**Lab ID:** 1805497-008

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	920	30		mg/Kg	20	5/15/2018 12:38:22 PM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/13/2018 6:54:49 PM	38039
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/13/2018 6:54:49 PM	38039
Surr: DNOP	108	70-130		%Rec	1	5/13/2018 6:54:49 PM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/10/2018 11:20:42 PM	38023
Surr: BFB	82.9	15-316		%Rec	1	5/10/2018 11:20:42 PM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	5/10/2018 11:20:42 PM	38023
Benzene	ND	0.025		mg/Kg	1	5/10/2018 11:20:42 PM	38023
Toluene	ND	0.050		mg/Kg	1	5/10/2018 11:20:42 PM	38023
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2018 11:20:42 PM	38023
Xylenes, Total	ND	0.099		mg/Kg	1	5/10/2018 11:20:42 PM	38023
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/10/2018 11:20:42 PM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW12

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 12:47:00 PM

**Lab ID:** 1805497-009

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	75		mg/Kg	50	5/16/2018 11:16:21 AM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	74	9.9		mg/Kg	1	5/15/2018 5:23:30 AM	38039
Motor Oil Range Organics (MRO)	88	49		mg/Kg	1	5/15/2018 5:23:30 AM	38039
Surr: DNOP	120	70-130		%Rec	1	5/15/2018 5:23:30 AM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/10/2018 11:43:56 PM	38023
Surr: BFB	89.5	15-316		%Rec	1	5/10/2018 11:43:56 PM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	5/10/2018 11:43:56 PM	38023
Benzene	ND	0.023		mg/Kg	1	5/10/2018 11:43:56 PM	38023
Toluene	ND	0.047		mg/Kg	1	5/10/2018 11:43:56 PM	38023
Ethylbenzene	ND	0.047		mg/Kg	1	5/10/2018 11:43:56 PM	38023
Xylenes, Total	ND	0.093		mg/Kg	1	5/10/2018 11:43:56 PM	38023
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/10/2018 11:43:56 PM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**Date Reported: **5/18/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** SW2**Project:** Candelario EMR**Collection Date:** 5/1/2018 11:45:00 AM**Lab ID:** 1805497-010**Matrix:** SOIL**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	4700	300		mg/Kg	200	5/16/2018 11:28:45 AM	38095
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	62	10		mg/Kg	1	5/13/2018 7:39:29 PM	38039
Motor Oil Range Organics (MRO)	68	50		mg/Kg	1	5/13/2018 7:39:29 PM	38039
Surr: DNOP	105	70-130		%Rec	1	5/13/2018 7:39:29 PM	38039
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/11/2018 1:17:39 AM	38023
Surr: BFB	87.1	15-316		%Rec	1	5/11/2018 1:17:39 AM	38023
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.091		mg/Kg	1	5/11/2018 1:17:39 AM	38023
Benzene	ND	0.023		mg/Kg	1	5/11/2018 1:17:39 AM	38023
Toluene	ND	0.046		mg/Kg	1	5/11/2018 1:17:39 AM	38023
Ethylbenzene	ND	0.046		mg/Kg	1	5/11/2018 1:17:39 AM	38023
Xylenes, Total	ND	0.091		mg/Kg	1	5/11/2018 1:17:39 AM	38023
Surr: 4-Bromofluorobenzene	98.1	80-120		%Rec	1	5/11/2018 1:17:39 AM	38023

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW17

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 1:02:00 PM

**Lab ID:** 1805497-011

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	7700	300		mg/Kg	200	5/16/2018 11:41:10 AM	38095
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/10/2018 3:19:39 PM	38028
Surr: BFB	116	70-130		%Rec	1	5/10/2018 3:19:39 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/14/2018 3:18:56 PM	38056
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/14/2018 3:18:56 PM	38056
Surr: DNOP	110	70-130		%Rec	1	5/14/2018 3:18:56 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.046		mg/Kg	1	5/10/2018 3:19:39 PM	38028
Benzene	ND	0.023		mg/Kg	1	5/10/2018 3:19:39 PM	38028
Toluene	ND	0.046		mg/Kg	1	5/10/2018 3:19:39 PM	38028
Ethylbenzene	ND	0.046		mg/Kg	1	5/10/2018 3:19:39 PM	38028
Xylenes, Total	ND	0.092		mg/Kg	1	5/10/2018 3:19:39 PM	38028
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	5/10/2018 3:19:39 PM	38028
Surr: Toluene-d8	96.0	70-130		%Rec	1	5/10/2018 3:19:39 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW22

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 1:23:00 PM

**Lab ID:** 1805497-012

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1000	30		mg/Kg	20	5/15/2018 2:54:05 PM	38095
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/10/2018 3:42:52 PM	38028
Surr: BFB	123	70-130		%Rec	1	5/10/2018 3:42:52 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	54	9.9		mg/Kg	1	5/14/2018 4:25:33 PM	38056
Motor Oil Range Organics (MRO)	80	50		mg/Kg	1	5/14/2018 4:25:33 PM	38056
Surr: DNOP	109	70-130		%Rec	1	5/14/2018 4:25:33 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	5/10/2018 3:42:52 PM	38028
Benzene	ND	0.024		mg/Kg	1	5/10/2018 3:42:52 PM	38028
Toluene	ND	0.048		mg/Kg	1	5/10/2018 3:42:52 PM	38028
Ethylbenzene	ND	0.048		mg/Kg	1	5/10/2018 3:42:52 PM	38028
Xylenes, Total	ND	0.096		mg/Kg	1	5/10/2018 3:42:52 PM	38028
Surr: 4-Bromofluorobenzene	134	70-130	S	%Rec	1	5/10/2018 3:42:52 PM	38028
Surr: Toluene-d8	90.9	70-130		%Rec	1	5/10/2018 3:42:52 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW6

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 12:30:00 PM

**Lab ID:** 1805497-013

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	2100	75		mg/Kg	50	5/16/2018 11:53:34 AM	38095
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/10/2018 4:05:57 PM	38028
Surr: BFB	117	70-130		%Rec	1	5/10/2018 4:05:57 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/14/2018 4:47:41 PM	38056
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/14/2018 4:47:41 PM	38056
Surr: DNOP	107	70-130		%Rec	1	5/14/2018 4:47:41 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.047		mg/Kg	1	5/10/2018 4:05:57 PM	38028
Benzene	ND	0.023		mg/Kg	1	5/10/2018 4:05:57 PM	38028
Toluene	ND	0.047		mg/Kg	1	5/10/2018 4:05:57 PM	38028
Ethylbenzene	ND	0.047		mg/Kg	1	5/10/2018 4:05:57 PM	38028
Xylenes, Total	ND	0.094		mg/Kg	1	5/10/2018 4:05:57 PM	38028
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	5/10/2018 4:05:57 PM	38028
Surr: Toluene-d8	94.1	70-130		%Rec	1	5/10/2018 4:05:57 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** SW16

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 12:57:00 PM

**Lab ID:** 1805497-014

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	19000	750		mg/Kg	500	5/16/2018 12:30:48 PM	38095
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/10/2018 4:29:08 PM	38028
Surr: BFB	122	70-130		%Rec	1	5/10/2018 4:29:08 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/14/2018 5:09:52 PM	38056
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/14/2018 5:09:52 PM	38056
Surr: DNOP	111	70-130		%Rec	1	5/14/2018 5:09:52 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	5/10/2018 4:29:08 PM	38028
Benzene	ND	0.024		mg/Kg	1	5/10/2018 4:29:08 PM	38028
Toluene	ND	0.048		mg/Kg	1	5/10/2018 4:29:08 PM	38028
Ethylbenzene	ND	0.048		mg/Kg	1	5/10/2018 4:29:08 PM	38028
Xylenes, Total	ND	0.096		mg/Kg	1	5/10/2018 4:29:08 PM	38028
Surr: 4-Bromofluorobenzene	133	70-130	S	%Rec	1	5/10/2018 4:29:08 PM	38028
Surr: Toluene-d8	94.2	70-130		%Rec	1	5/10/2018 4:29:08 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L10-2

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 2:31:00 PM

**Lab ID:** 1805497-015

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	16000	750		mg/Kg	500	5/16/2018 12:43:14 PM	38095
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/10/2018 4:52:16 PM	38028
Surr: BFB	117	70-130		%Rec	1	5/10/2018 4:52:16 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/14/2018 5:31:56 PM	38056
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/14/2018 5:31:56 PM	38056
Surr: DNOP	110	70-130		%Rec	1	5/14/2018 5:31:56 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.046		mg/Kg	1	5/10/2018 4:52:16 PM	38028
Benzene	ND	0.023		mg/Kg	1	5/10/2018 4:52:16 PM	38028
Toluene	ND	0.046		mg/Kg	1	5/10/2018 4:52:16 PM	38028
Ethylbenzene	ND	0.046		mg/Kg	1	5/10/2018 4:52:16 PM	38028
Xylenes, Total	ND	0.092		mg/Kg	1	5/10/2018 4:52:16 PM	38028
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	5/10/2018 4:52:16 PM	38028
Surr: Toluene-d8	91.6	70-130		%Rec	1	5/10/2018 4:52:16 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805497**

Date Reported: **5/18/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L11-1

**Project:** Candelario EMR

**Collection Date:** 5/1/2018 2:58:00 PM

**Lab ID:** 1805497-016

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	27000	1500		mg/Kg	1E	5/16/2018 12:55:38 PM	38095
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	12	4.8		mg/Kg	1	5/10/2018 5:15:27 PM	38028
Surr: BFB	113	70-130		%Rec	1	5/10/2018 5:15:27 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	180	9.3		mg/Kg	1	5/16/2018 3:03:54 PM	38056
Motor Oil Range Organics (MRO)	130	47		mg/Kg	1	5/16/2018 3:03:54 PM	38056
Surr: DNOP	106	70-130		%Rec	1	5/16/2018 3:03:54 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	5/10/2018 5:15:27 PM	38028
Benzene	ND	0.024		mg/Kg	1	5/10/2018 5:15:27 PM	38028
Toluene	ND	0.048		mg/Kg	1	5/10/2018 5:15:27 PM	38028
Ethylbenzene	ND	0.048		mg/Kg	1	5/10/2018 5:15:27 PM	38028
Xylenes, Total	ND	0.095		mg/Kg	1	5/10/2018 5:15:27 PM	38028
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	5/10/2018 5:15:27 PM	38028
Surr: Toluene-d8	96.0	70-130		%Rec	1	5/10/2018 5:15:27 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805497

18-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38095		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 38095		RunNo: 51299					
Prep Date:	5/14/2018		Analysis Date: 5/15/2018		SeqNo: 1667708		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-38095		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 38095		RunNo: 51299					
Prep Date:	5/14/2018		Analysis Date: 5/15/2018		SeqNo: 1667709		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.1	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805497

18-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	LCS-38039		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 38039		RunNo: 51216					
Prep Date:	5/10/2018		Analysis Date: 5/11/2018		SeqNo: 1664753		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.4	70	130			
Surr: DNOP	4.8		5.000		96.4	70	130			

Sample ID	MB-38039		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 38039		RunNo: 51216					
Prep Date:	5/10/2018		Analysis Date: 5/11/2018		SeqNo: 1664754		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	9.9		10.00		99.2	70	130			

Sample ID	MB-38056	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	38056		RunNo:	51235				
Prep Date:	5/10/2018	Analysis Date:	5/14/2018		SeqNo:	1666875		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	11		10.00		107	70	130			

Sample ID	LCS-38056		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 38056		RunNo: 51235					
Prep Date:	5/10/2018		Analysis Date: 5/14/2018		SeqNo: 1666887		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.7	70	130			
Surr: DNOP	5.0		5.000		99.8	70	130			

Sample ID	1805497-011AMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	SW17		Batch ID: 38056		RunNo: 51235					
Prep Date:	5/10/2018		Analysis Date: 5/14/2018		SeqNo: 1666890		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.6	48.08	6.940	84.8	55.8	125			
Surr: DNOP	5.2		4.808		108	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805497

18-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	1805497-011AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	SW17	Batch ID:	38056	RunNo:	51235					
Prep Date:	5/10/2018	Analysis Date:	5/14/2018	SeqNo:	1666891	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.8	49.21	6.940	83.6	55.8	125	0.740	20	
Surr: DNOP	5.2		4.921		105	70	130	0	0	

Sample ID	MB-38113	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	38113	RunNo:	51235					
Prep Date:	5/15/2018	Analysis Date:	5/15/2018	SeqNo:	1667045	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		104	70	130			

Sample ID	LCS-38113	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	38113	RunNo:	51235					
Prep Date:	5/15/2018	Analysis Date:	5/15/2018	SeqNo:	1667066	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		106	70	130			

Sample ID	LCS-38140	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	38140	RunNo:	51307					
Prep Date:	5/16/2018	Analysis Date:	5/16/2018	SeqNo:	1667893	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.8	70	130			

Sample ID	MB-38140	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	38140	RunNo:	51307					
Prep Date:	5/16/2018	Analysis Date:	5/16/2018	SeqNo:	1667894	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		102	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805497

18-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38023		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 38023		RunNo: 51171					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1662961		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	890		1000		89.2	15	316			

Sample ID	LCS-38023		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 38023		RunNo: 51171					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1662962		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	104	75.9	131			
Surr: BFB	1100		1000		105	15	316			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805497

18-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38023		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 38023		RunNo: 51171					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1663002		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID	LCS-38023		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 38023		RunNo: 51171					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1663003		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.94	0.10	1.000	0	94.2	70.1	121			
Benzene	0.94	0.025	1.000	0	94.3	77.3	128			
Toluene	0.98	0.050	1.000	0	97.7	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	96.1	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	98.5	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805497

18-May-18

**Client:** Souder, Miller & Associates

**Project:** Candelario EMR

Sample ID <b>1805497-012ams</b>	SampType: <b>MS4</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>SW22</b>	Batch ID: <b>38028</b>		RunNo: <b>51185</b>							
Prep Date: <b>5/9/2018</b>	Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663116</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.024	0.9728	0	80.6	80	120			
Toluene	0.90	0.049	0.9728	0	92.7	80	120			
Ethylbenzene	0.97	0.049	0.9728	0.005832	99.1	80	120			
Xylenes, Total	2.9	0.097	2.918	0.02089	98.3	80	120			
Surr: 4-Bromofluorobenzene	0.51		0.4864		105	70	130			
Surr: Toluene-d8	0.47		0.4864		96.5	70	130			

Sample ID <b>1805497-012amsd</b>	SampType: <b>MSD4</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>SW22</b>	Batch ID: <b>38028</b>		RunNo: <b>51185</b>							
Prep Date: <b>5/9/2018</b>	Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663117</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.025	0.9872	0	81.3	80	120	2.43	0	
Toluene	0.92	0.049	0.9872	0	93.2	80	120	2.09	0	
Ethylbenzene	0.98	0.049	0.9872	0.005832	98.8	80	120	1.14	0	
Xylenes, Total	3.0	0.099	2.962	0.02089	99.3	80	120	2.45	0	
Surr: 4-Bromofluorobenzene	0.53		0.4936		108	70	130	0	0	
Surr: Toluene-d8	0.46		0.4936		93.8	70	130	0	0	

Sample ID <b>lcs-38028</b>	SampType: <b>LCS4</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>38028</b>		RunNo: <b>51185</b>							
Prep Date: <b>5/9/2018</b>	Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663139</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	1.000	0	81.3	80	120			
Toluene	0.92	0.050	1.000	0	92.3	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Toluene-d8	0.47		0.5000		93.9	70	130			

Sample ID <b>mb-38028</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>PBS</b>	Batch ID: <b>38028</b>		RunNo: <b>51185</b>							
Prep Date: <b>5/9/2018</b>	Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663140</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.050								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								

### 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 Quantitative 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#: 1805497

18-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	mb-38028		SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles Short List			
Client ID:	PBS		Batch ID:	38028		RunNo:	51185			
Prep Date:	5/9/2018		Analysis Date:	5/10/2018		SeqNo:	1663140	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.64		0.5000		128	70	130			
Surr: Toluene-d8	0.45		0.5000		90.0	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 Quantitative 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#: 1805497

18-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	1805497-011ams	SampType: MS			TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	SW17	Batch ID: 38028			RunNo: 51185					
Prep Date:	5/9/2018	Analysis Date: 5/10/2018			SeqNo: 1663084		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.8	24.08	0	85.0	64.7	142			
Surr: BFB	490		481.7		102	70	130			

Sample ID	1805497-011amsd		SampType:	MSD		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	SW17		Batch ID:	38028		RunNo:	51185				
Prep Date:	5/9/2018		Analysis Date:	5/10/2018		SeqNo:	1663085		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	21	4.8	24.11	0	87.8	64.7	142	3.38	20		
Surr: BFB	510		482.2		105	70	130	0	0		

Sample ID	lcs-38028		SampType: LCS		TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS		Batch ID: 38028		RunNo: 51185					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1663109		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.7	70	130			
Surr: BFB	510		500.0		103	70	130			

Sample ID	mb-38028		SampType: MBLK		TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS		Batch ID: 38028		RunNo: 51185					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1663110		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	590		500.0		118	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1805497

RcptNo: 1

Received By: Isaiah Ortiz

5/9/2018 9:30:00 AM

Completed By: Ashley Gallegos

5/9/2018 11:58:33 AM

Reviewed By:

*[Signature]*

05/09/18

Labeled by:

*IC*

*[Signature]*

JB 05/09/18

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

## Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *JB*

*05/09/18*

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			







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

May 21, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario EMR

OrderNo.: 1805498

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 36 sample(s) on 5/9/2018 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](http://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 #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW1

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 10:35:00 AM

**Lab ID:** 1805498-001

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	840	30		mg/Kg	20	5/15/2018 10:21:17 AM	38115
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/10/2018 11:48:37 PM	38028
Surr: BFB	116	70-130		%Rec	1	5/10/2018 11:48:37 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/14/2018 6:16:47 PM	38056
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/14/2018 6:16:47 PM	38056
Surr: DNOP	111	70-130		%Rec	1	5/14/2018 6:16:47 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/10/2018 11:48:37 PM	38028
Benzene	ND	0.025		mg/Kg	1	5/10/2018 11:48:37 PM	38028
Toluene	ND	0.050		mg/Kg	1	5/10/2018 11:48:37 PM	38028
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2018 11:48:37 PM	38028
Xylenes, Total	ND	0.10		mg/Kg	1	5/10/2018 11:48:37 PM	38028
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	5/10/2018 11:48:37 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW2-1

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 12:00:00 PM

**Lab ID:** 1805498-002

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	80	30		mg/Kg	20	5/15/2018 10:58:30 AM	38115
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/11/2018 12:11:42 AM	38028
Surr: BFB	111	70-130		%Rec	1	5/11/2018 12:11:42 AM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/14/2018 6:39:06 PM	38056
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/14/2018 6:39:06 PM	38056
Surr: DNOP	112	70-130		%Rec	1	5/14/2018 6:39:06 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	5/11/2018 12:11:42 AM	38028
Benzene	ND	0.024		mg/Kg	1	5/11/2018 12:11:42 AM	38028
Toluene	ND	0.049		mg/Kg	1	5/11/2018 12:11:42 AM	38028
Ethylbenzene	ND	0.049		mg/Kg	1	5/11/2018 12:11:42 AM	38028
Xylenes, Total	ND	0.097		mg/Kg	1	5/11/2018 12:11:42 AM	38028
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	5/11/2018 12:11:42 AM	38028
Surr: Toluene-d8	89.6	70-130		%Rec	1	5/11/2018 12:11:42 AM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order 1805498

Date Reported: 5/21/2018

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH1

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 10:40:00 PM

**Lab ID:** 1805498-003

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	11000	750		mg/Kg	500	5/16/2018 1:19:22 PM	38115
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/11/2018 12:34:54 AM	38028
Surr: BFB	119	70-130		%Rec	1	5/11/2018 12:34:54 AM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/14/2018 7:01:16 PM	38056
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/14/2018 7:01:16 PM	38056
Surr: DNOP	103	70-130		%Rec	1	5/14/2018 7:01:16 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.047		mg/Kg	1	5/11/2018 12:34:54 AM	38028
Benzene	ND	0.023		mg/Kg	1	5/11/2018 12:34:54 AM	38028
Toluene	ND	0.047		mg/Kg	1	5/11/2018 12:34:54 AM	38028
Ethylbenzene	ND	0.047		mg/Kg	1	5/11/2018 12:34:54 AM	38028
Xylenes, Total	ND	0.093		mg/Kg	1	5/11/2018 12:34:54 AM	38028
Surr: 4-Bromofluorobenzene	130	70-130		%Rec	1	5/11/2018 12:34:54 AM	38028
Surr: Toluene-d8	96.9	70-130		%Rec	1	5/11/2018 12:34:54 AM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW3

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 11:00:00 AM

**Lab ID:** 1805498-004

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1100	30		mg/Kg	20	5/15/2018 11:23:20 AM	38115
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/11/2018 12:58:00 AM	38028
Surr: BFB	117	70-130		%Rec	1	5/11/2018 12:58:00 AM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/14/2018 7:23:34 PM	38056
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/14/2018 7:23:34 PM	38056
Surr: DNOP	104	70-130		%Rec	1	5/14/2018 7:23:34 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	5/11/2018 12:58:00 AM	38028
Benzene	ND	0.024		mg/Kg	1	5/11/2018 12:58:00 AM	38028
Toluene	ND	0.049		mg/Kg	1	5/11/2018 12:58:00 AM	38028
Ethylbenzene	ND	0.049		mg/Kg	1	5/11/2018 12:58:00 AM	38028
Xylenes, Total	ND	0.098		mg/Kg	1	5/11/2018 12:58:00 AM	38028
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	5/11/2018 12:58:00 AM	38028
Surr: Toluene-d8	97.1	70-130		%Rec	1	5/11/2018 12:58:00 AM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW4-1

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 12:30:00 PM

**Lab ID:** 1805498-005

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	720	30		mg/Kg	20	5/15/2018 11:35:45 AM	38115
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/11/2018 1:21:05 AM	38028
Surr: BFB	114	70-130		%Rec	1	5/11/2018 1:21:05 AM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/16/2018 1:35:29 PM	38056
Motor Oil Range Organics (MRO)	73	48		mg/Kg	1	5/16/2018 1:35:29 PM	38056
Surr: DNOP	70.0	70-130		%Rec	1	5/16/2018 1:35:29 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	5/11/2018 1:21:05 AM	38028
Benzene	ND	0.024		mg/Kg	1	5/11/2018 1:21:05 AM	38028
Toluene	ND	0.048		mg/Kg	1	5/11/2018 1:21:05 AM	38028
Ethylbenzene	ND	0.048		mg/Kg	1	5/11/2018 1:21:05 AM	38028
Xylenes, Total	ND	0.095		mg/Kg	1	5/11/2018 1:21:05 AM	38028
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	5/11/2018 1:21:05 AM	38028
Surr: Toluene-d8	83.4	70-130		%Rec	1	5/11/2018 1:21:05 AM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW5

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 11:20:00 AM

**Lab ID:** 1805498-006

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	880	30		mg/Kg	20	5/15/2018 12:12:58 PM	38115
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/11/2018 1:44:07 AM	38028
Surr: BFB	117	70-130		%Rec	1	5/11/2018 1:44:07 AM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/14/2018 8:08:02 PM	38056
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/14/2018 8:08:02 PM	38056
Surr: DNOP	102	70-130		%Rec	1	5/14/2018 8:08:02 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.047		mg/Kg	1	5/11/2018 1:44:07 AM	38028
Benzene	ND	0.023		mg/Kg	1	5/11/2018 1:44:07 AM	38028
Toluene	ND	0.047		mg/Kg	1	5/11/2018 1:44:07 AM	38028
Ethylbenzene	ND	0.047		mg/Kg	1	5/11/2018 1:44:07 AM	38028
Xylenes, Total	ND	0.094		mg/Kg	1	5/11/2018 1:44:07 AM	38028
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	5/11/2018 1:44:07 AM	38028
Surr: Toluene-d8	94.7	70-130		%Rec	1	5/11/2018 1:44:07 AM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW7

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 11:37:00 AM

**Lab ID:** 1805498-007

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	340	30		mg/Kg	20	5/15/2018 12:25:23 PM	38115
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/11/2018 2:07:14 AM	38028
Surr: BFB	119	70-130		%Rec	1	5/11/2018 2:07:14 AM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/14/2018 8:30:22 PM	38056
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/14/2018 8:30:22 PM	38056
Surr: DNOP	107	70-130		%Rec	1	5/14/2018 8:30:22 PM	38056
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	5/11/2018 2:07:14 AM	38028
Benzene	ND	0.024		mg/Kg	1	5/11/2018 2:07:14 AM	38028
Toluene	ND	0.049		mg/Kg	1	5/11/2018 2:07:14 AM	38028
Ethylbenzene	ND	0.049		mg/Kg	1	5/11/2018 2:07:14 AM	38028
Xylenes, Total	ND	0.098		mg/Kg	1	5/11/2018 2:07:14 AM	38028
Surr: 4-Bromofluorobenzene	129	70-130		%Rec	1	5/11/2018 2:07:14 AM	38028
Surr: Toluene-d8	93.2	70-130		%Rec	1	5/11/2018 2:07:14 AM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW6-1

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 1:00:00 PM

**Lab ID:** 1805498-008

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	280	30		mg/Kg	20	5/15/2018 1:02:37 PM	38115
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/15/2018 6:20:08 PM	38056
Motor Oil Range Organics (MRO)	63	48		mg/Kg	1	5/15/2018 6:20:08 PM	38056
Surr: DNOP	111	70-130		%Rec	1	5/15/2018 6:20:08 PM	38056
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/11/2018 1:41:05 AM	38032
Surr: BFB	91.3	15-316		%Rec	1	5/11/2018 1:41:05 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	5/11/2018 1:41:05 AM	38032
Benzene	ND	0.023		mg/Kg	1	5/11/2018 1:41:05 AM	38032
Toluene	ND	0.046		mg/Kg	1	5/11/2018 1:41:05 AM	38032
Ethylbenzene	ND	0.046		mg/Kg	1	5/11/2018 1:41:05 AM	38032
Xylenes, Total	ND	0.092		mg/Kg	1	5/11/2018 1:41:05 AM	38032
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/11/2018 1:41:05 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW8-1

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 1:23:00 PM

**Lab ID:** 1805498-009

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	510	30		mg/Kg	20	5/15/2018 1:15:02 PM	38115
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/15/2018 7:04:33 PM	38056
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/15/2018 7:04:33 PM	38056
Surr: DNOP	109	70-130		%Rec	1	5/15/2018 7:04:33 PM	38056
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/11/2018 2:50:56 AM	38032
Surr: BFB	94.8	15-316		%Rec	1	5/11/2018 2:50:56 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	5/11/2018 2:50:56 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/11/2018 2:50:56 AM	38032
Toluene	ND	0.048		mg/Kg	1	5/11/2018 2:50:56 AM	38032
Ethylbenzene	ND	0.048		mg/Kg	1	5/11/2018 2:50:56 AM	38032
Xylenes, Total	ND	0.096		mg/Kg	1	5/11/2018 2:50:56 AM	38032
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	5/11/2018 2:50:56 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW9

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 12:12:00 PM

**Lab ID:** 1805498-010

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	210	30		mg/Kg	20	5/15/2018 1:27:26 PM	38115
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/14/2018 9:59:27 PM	38056
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/14/2018 9:59:27 PM	38056
Surr: DNOP	108	70-130		%Rec	1	5/14/2018 9:59:27 PM	38056
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/11/2018 4:01:40 AM	38032
Surr: BFB	84.0	15-316		%Rec	1	5/11/2018 4:01:40 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	5/11/2018 4:01:40 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/11/2018 4:01:40 AM	38032
Toluene	ND	0.048		mg/Kg	1	5/11/2018 4:01:40 AM	38032
Ethylbenzene	ND	0.048		mg/Kg	1	5/11/2018 4:01:40 AM	38032
Xylenes, Total	ND	0.095		mg/Kg	1	5/11/2018 4:01:40 AM	38032
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/11/2018 4:01:40 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW10-1

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 2:00:00 PM

**Lab ID:** 1805498-011

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	98	30		mg/Kg	20	5/15/2018 1:39:51 PM	38115
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/16/2018 2:19:40 PM	38056
Motor Oil Range Organics (MRO)	120	49		mg/Kg	1	5/16/2018 2:19:40 PM	38056
Surr: DNOP	100	70-130		%Rec	1	5/16/2018 2:19:40 PM	38056
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/11/2018 4:25:17 AM	38032
Surr: BFB	85.0	15-316		%Rec	1	5/11/2018 4:25:17 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	5/11/2018 4:25:17 AM	38032
Benzene	ND	0.023		mg/Kg	1	5/11/2018 4:25:17 AM	38032
Toluene	ND	0.046		mg/Kg	1	5/11/2018 4:25:17 AM	38032
Ethylbenzene	ND	0.046		mg/Kg	1	5/11/2018 4:25:17 AM	38032
Xylenes, Total	ND	0.092		mg/Kg	1	5/11/2018 4:25:17 AM	38032
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/11/2018 4:25:17 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW14

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 1:30:00 PM

**Lab ID:** 1805498-012

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1200	75		mg/Kg	50	5/16/2018 1:56:35 PM	38115
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/15/2018 8:33:49 PM	38056
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/15/2018 8:33:49 PM	38056
Surr: DNOP	113	70-130		%Rec	1	5/15/2018 8:33:49 PM	38056
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/11/2018 4:48:54 AM	38032
Surr: BFB	90.8	15-316		%Rec	1	5/11/2018 4:48:54 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	5/11/2018 4:48:54 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/11/2018 4:48:54 AM	38032
Toluene	ND	0.048		mg/Kg	1	5/11/2018 4:48:54 AM	38032
Ethylbenzene	ND	0.048		mg/Kg	1	5/11/2018 4:48:54 AM	38032
Xylenes, Total	ND	0.097		mg/Kg	1	5/11/2018 4:48:54 AM	38032
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/11/2018 4:48:54 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH11-1'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 2:47:00 PM

**Lab ID:** 1805498-013

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	5200	300		mg/Kg	200	5/16/2018 2:08:59 PM	38115

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH7-2.5'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 12:50:00 PM

**Lab ID:** 1805498-014

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	210	30		mg/Kg	20	5/15/2018 2:41:53 PM	38115
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/14/2018 11:06:18 PM	38056
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/14/2018 11:06:18 PM	38056
Surr: DNOP	108	70-130		%Rec	1	5/14/2018 11:06:18 PM	38056
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/11/2018 5:24:38 PM	38032
Surr: BFB	92.8	15-316		%Rec	1	5/11/2018 5:24:38 PM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	5/11/2018 5:24:38 PM	38032
Benzene	ND	0.024		mg/Kg	1	5/11/2018 5:24:38 PM	38032
Toluene	ND	0.049		mg/Kg	1	5/11/2018 5:24:38 PM	38032
Ethylbenzene	ND	0.049		mg/Kg	1	5/11/2018 5:24:38 PM	38032
Xylenes, Total	ND	0.097		mg/Kg	1	5/11/2018 5:24:38 PM	38032
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	5/11/2018 5:24:38 PM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH8-2'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 1:25:00 PM

**Lab ID:** 1805498-015

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	3400	150		mg/Kg	100	5/16/2018 2:21:23 PM	38115

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH9-2.5'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 1:45:00 PM

**Lab ID:** 1805498-016

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	910	30		mg/Kg	20	5/15/2018 3:06:42 PM	38115
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/15/2018 9:18:32 PM	38056
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/15/2018 9:18:32 PM	38056
Surr: DNOP	110	70-130		%Rec	1	5/15/2018 9:18:32 PM	38056
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/11/2018 5:48:06 PM	38032
Surr: BFB	92.6	15-316		%Rec	1	5/11/2018 5:48:06 PM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	5/11/2018 5:48:06 PM	38032
Benzene	ND	0.024		mg/Kg	1	5/11/2018 5:48:06 PM	38032
Toluene	ND	0.049		mg/Kg	1	5/11/2018 5:48:06 PM	38032
Ethylbenzene	ND	0.049		mg/Kg	1	5/11/2018 5:48:06 PM	38032
Xylenes, Total	ND	0.097		mg/Kg	1	5/11/2018 5:48:06 PM	38032
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	5/11/2018 5:48:06 PM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH11-1.5'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 3:00:00 PM

**Lab ID:** 1805498-017

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	450		30	mg/Kg	20	5/15/2018 3:19:06 PM	38115

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH7-3'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 1:08:00 PM

**Lab ID:** 1805498-018

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	790	30		mg/Kg	20	5/15/2018 3:31:31 PM	38115
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/15/2018 12:34:52 AM	38069
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/15/2018 12:34:52 AM	38069
Surr: DNOP	110	70-130		%Rec	1	5/15/2018 12:34:52 AM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/12/2018 12:25:30 AM	38032
Surr: BFB	93.4	15-316		%Rec	1	5/12/2018 12:25:30 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	5/12/2018 12:25:30 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/12/2018 12:25:30 AM	38032
Toluene	ND	0.048		mg/Kg	1	5/12/2018 12:25:30 AM	38032
Ethylbenzene	ND	0.048		mg/Kg	1	5/12/2018 12:25:30 AM	38032
Xylenes, Total	ND	0.095		mg/Kg	1	5/12/2018 12:25:30 AM	38032
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	5/12/2018 12:25:30 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH2-2'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 10:40:00 AM

**Lab ID:** 1805498-019

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	6700	300		mg/Kg	200	5/16/2018 2:33:48 PM	38134

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH4-3'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 11:30:00 AM

**Lab ID:** 1805498-020

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	7900	300		mg/Kg	200	5/16/2018 2:46:13 PM	38115
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/15/2018 12:56:59 AM	38069
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/15/2018 12:56:59 AM	38069
Surr: DNOP	111	70-130		%Rec	1	5/15/2018 12:56:59 AM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/12/2018 12:48:48 AM	38032
Surr: BFB	91.2	15-316		%Rec	1	5/12/2018 12:48:48 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	5/12/2018 12:48:48 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/12/2018 12:48:48 AM	38032
Toluene	ND	0.048		mg/Kg	1	5/12/2018 12:48:48 AM	38032
Ethylbenzene	ND	0.048		mg/Kg	1	5/12/2018 12:48:48 AM	38032
Xylenes, Total	ND	0.095		mg/Kg	1	5/12/2018 12:48:48 AM	38032
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/12/2018 12:48:48 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH3-2'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 11:00:00 AM

**Lab ID:** 1805498-021

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	2000	75		mg/Kg	50	5/16/2018 2:58:37 PM	38134

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH5-3'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 11:50:00 AM

**Lab ID:** 1805498-022

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	3400	150		mg/Kg	100	5/16/2018 3:11:02 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	7.8		mg/Kg	1	5/15/2018 1:19:22 AM	38069
Motor Oil Range Organics (MRO)	ND	39		mg/Kg	1	5/15/2018 1:19:22 AM	38069
Surr: DNOP	111	70-130		%Rec	1	5/15/2018 1:19:22 AM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/12/2018 1:12:09 AM	38032
Surr: BFB	91.2	15-316		%Rec	1	5/12/2018 1:12:09 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	5/12/2018 1:12:09 AM	38032
Benzene	ND	0.023		mg/Kg	1	5/12/2018 1:12:09 AM	38032
Toluene	ND	0.047		mg/Kg	1	5/12/2018 1:12:09 AM	38032
Ethylbenzene	ND	0.047		mg/Kg	1	5/12/2018 1:12:09 AM	38032
Xylenes, Total	ND	0.094		mg/Kg	1	5/12/2018 1:12:09 AM	38032
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/12/2018 1:12:09 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH6-3.5'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 12:07:00 PM

**Lab ID:** 1805498-023

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	490	30		mg/Kg	20	5/15/2018 5:23:01 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/13/2018 8:30:34 AM	38069
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/13/2018 8:30:34 AM	38069
Surr: DNOP	88.7	70-130		%Rec	1	5/13/2018 8:30:34 AM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2018 1:35:44 AM	38032
Surr: BFB	94.0	15-316		%Rec	1	5/12/2018 1:35:44 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	5/12/2018 1:35:44 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/12/2018 1:35:44 AM	38032
Toluene	ND	0.049		mg/Kg	1	5/12/2018 1:35:44 AM	38032
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2018 1:35:44 AM	38032
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2018 1:35:44 AM	38032
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	5/12/2018 1:35:44 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HBH10-0.5'

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 2:00:00 PM

**Lab ID:** 1805498-024

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	170	30		mg/Kg	20	5/15/2018 5:35:26 PM	38134

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW13

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 1:32:00 PM

**Lab ID:** 1805498-025

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	280	30		mg/Kg	20	5/15/2018 5:47:50 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/13/2018 8:52:51 AM	38069
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/13/2018 8:52:51 AM	38069
Surr: DNOP	92.1	70-130		%Rec	1	5/13/2018 8:52:51 AM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/12/2018 1:59:12 AM	38032
Surr: BFB	89.3	15-316		%Rec	1	5/12/2018 1:59:12 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	5/12/2018 1:59:12 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/12/2018 1:59:12 AM	38032
Toluene	ND	0.048		mg/Kg	1	5/12/2018 1:59:12 AM	38032
Ethylbenzene	ND	0.048		mg/Kg	1	5/12/2018 1:59:12 AM	38032
Xylenes, Total	ND	0.096		mg/Kg	1	5/12/2018 1:59:12 AM	38032
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/12/2018 1:59:12 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW11

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 2:15:00 PM

**Lab ID:** 1805498-026

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	310	30		mg/Kg	20	5/15/2018 6:25:02 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/13/2018 9:59:32 AM	38069
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/13/2018 9:59:32 AM	38069
Surr: DNOP	89.5	70-130		%Rec	1	5/13/2018 9:59:32 AM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/12/2018 2:22:36 AM	38032
Surr: BFB	90.8	15-316		%Rec	1	5/12/2018 2:22:36 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	5/12/2018 2:22:36 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/12/2018 2:22:36 AM	38032
Toluene	ND	0.048		mg/Kg	1	5/12/2018 2:22:36 AM	38032
Ethylbenzene	ND	0.048		mg/Kg	1	5/12/2018 2:22:36 AM	38032
Xylenes, Total	ND	0.097		mg/Kg	1	5/12/2018 2:22:36 AM	38032
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/12/2018 2:22:36 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW12

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 12:35:00 PM

**Lab ID:** 1805498-027

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	700	30		mg/Kg	20	5/15/2018 6:37:27 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/13/2018 10:44:01 AM	38069
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/13/2018 10:44:01 AM	38069
Surr: DNOP	88.8	70-130		%Rec	1	5/13/2018 10:44:01 AM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/12/2018 2:46:06 AM	38032
Surr: BFB	89.6	15-316		%Rec	1	5/12/2018 2:46:06 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	5/12/2018 2:46:06 AM	38032
Benzene	ND	0.025		mg/Kg	1	5/12/2018 2:46:06 AM	38032
Toluene	ND	0.050		mg/Kg	1	5/12/2018 2:46:06 AM	38032
Ethylbenzene	ND	0.050		mg/Kg	1	5/12/2018 2:46:06 AM	38032
Xylenes, Total	ND	0.10		mg/Kg	1	5/12/2018 2:46:06 AM	38032
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	5/12/2018 2:46:06 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW16

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 2:20:00 PM

**Lab ID:** 1805498-029

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1600	75		mg/Kg	50	5/16/2018 3:35:51 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/15/2018 10:03:19 PM	38069
Motor Oil Range Organics (MRO)	81	49		mg/Kg	1	5/15/2018 10:03:19 PM	38069
Surr: DNOP	103	70-130		%Rec	1	5/15/2018 10:03:19 PM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/12/2018 3:33:05 AM	38032
Surr: BFB	93.6	15-316		%Rec	1	5/12/2018 3:33:05 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	5/12/2018 3:33:05 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/12/2018 3:33:05 AM	38032
Toluene	ND	0.048		mg/Kg	1	5/12/2018 3:33:05 AM	38032
Ethylbenzene	ND	0.048		mg/Kg	1	5/12/2018 3:33:05 AM	38032
Xylenes, Total	ND	0.097		mg/Kg	1	5/12/2018 3:33:05 AM	38032
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/12/2018 3:33:05 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** HSW18

**Project:** Candelario EMR

**Collection Date:** 5/2/2018 3:00:00 PM

**Lab ID:** 1805498-030

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1100	30		mg/Kg	20	5/15/2018 8:04:20 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/15/2018 10:47:51 PM	38069
Motor Oil Range Organics (MRO)	65	47		mg/Kg	1	5/15/2018 10:47:51 PM	38069
Surr: DNOP	92.8	70-130		%Rec	1	5/15/2018 10:47:51 PM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2018 3:56:36 AM	38032
Surr: BFB	90.0	15-316		%Rec	1	5/12/2018 3:56:36 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	5/12/2018 3:56:36 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/12/2018 3:56:36 AM	38032
Toluene	ND	0.049		mg/Kg	1	5/12/2018 3:56:36 AM	38032
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2018 3:56:36 AM	38032
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2018 3:56:36 AM	38032
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	5/12/2018 3:56:36 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L13-1

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 1:15:00 PM

**Lab ID:** 1805498-031

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	2000	75		mg/Kg	50	5/16/2018 3:48:15 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	240	93		mg/Kg	10	5/15/2018 2:48:09 AM	38069
Motor Oil Range Organics (MRO)	1000	470		mg/Kg	10	5/15/2018 2:48:09 AM	38069
Surr: DNOP	0	70-130	S	%Rec	10	5/15/2018 2:48:09 AM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2018 5:54:22 AM	38032
Surr: BFB	88.8	15-316		%Rec	1	5/12/2018 5:54:22 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	5/12/2018 5:54:22 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/12/2018 5:54:22 AM	38032
Toluene	ND	0.049		mg/Kg	1	5/12/2018 5:54:22 AM	38032
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2018 5:54:22 AM	38032
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2018 5:54:22 AM	38032
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	5/12/2018 5:54:22 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S4-2.5

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 1:37:00 PM

**Lab ID:** 1805498-032

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	2200	75		mg/Kg	50	5/16/2018 4:25:29 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/13/2018 1:42:12 PM	38069
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/13/2018 1:42:12 PM	38069
Surr: DNOP	98.4	70-130		%Rec	1	5/13/2018 1:42:12 PM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/12/2018 6:17:39 AM	38032
Surr: BFB	85.9	15-316		%Rec	1	5/12/2018 6:17:39 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	5/12/2018 6:17:39 AM	38032
Benzene	ND	0.024		mg/Kg	1	5/12/2018 6:17:39 AM	38032
Toluene	ND	0.048		mg/Kg	1	5/12/2018 6:17:39 AM	38032
Ethylbenzene	ND	0.048		mg/Kg	1	5/12/2018 6:17:39 AM	38032
Xylenes, Total	ND	0.097		mg/Kg	1	5/12/2018 6:17:39 AM	38032
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	5/12/2018 6:17:39 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** BG2

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 2:00:00 PM

**Lab ID:** 1805498-033

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1100	75		mg/Kg	50	5/16/2018 4:37:53 PM	38134

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** BG3

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 2:45:00 PM

**Lab ID:** 1805498-034

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	5/15/2018 8:53:59 PM	38134

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** BG5

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 2:30:00 PM

**Lab ID:** 1805498-035

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	4300	150		mg/Kg	100	5/16/2018 4:50:18 PM	38134

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805498**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L12-1

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 12:30:00 PM

**Lab ID:** 1805498-036

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	16000	750		mg/Kg	500	5/16/2018 5:02:42 PM	38134
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/13/2018 2:04:19 PM	38069
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/13/2018 2:04:19 PM	38069
Surr: DNOP	103	70-130		%Rec	1	5/13/2018 2:04:19 PM	38069
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/12/2018 6:41:08 AM	38032
Surr: BFB	84.5	15-316		%Rec	1	5/12/2018 6:41:08 AM	38032
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	5/12/2018 6:41:08 AM	38032
Benzene	ND	0.023		mg/Kg	1	5/12/2018 6:41:08 AM	38032
Toluene	ND	0.047		mg/Kg	1	5/12/2018 6:41:08 AM	38032
Ethylbenzene	ND	0.047		mg/Kg	1	5/12/2018 6:41:08 AM	38032
Xylenes, Total	ND	0.093		mg/Kg	1	5/12/2018 6:41:08 AM	38032
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	5/12/2018 6:41:08 AM	38032

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805498

29-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38134		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 38134		RunNo: 51301					
Prep Date:	5/15/2018		Analysis Date: 5/15/2018		SeqNo: 1667748		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-38134		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 38134		RunNo: 51301					
Prep Date:	5/15/2018		Analysis Date: 5/15/2018		SeqNo: 1667749		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Sample ID	MB-38115		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	38115		RunNo:	51286				
Prep Date:	5/15/2018		Analysis Date:	5/15/2018		SeqNo:	1668095		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-38115			SampType:	lcs		TestCode:	EPA Method 300.0: Anions			
Client ID:	LCSS			Batch ID:	38115		RunNo:	51286			
Prep Date:	5/15/2018			Analysis Date:	5/15/2018		SeqNo:	1668096		Units:	mg/Kg
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	95.1	90	110				

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805498

29-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	1805498-025AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	HSW13	Batch ID:	38069	RunNo:	51227					
Prep Date:	5/11/2018	Analysis Date:	5/13/2018	SeqNo:	1665161	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.8	49.02	0	117	55.8	125			
Surr: DNOP	5.5		4.902		111	70	130			

Sample ID	1805498-025AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	HSW13	Batch ID:	38069	RunNo:	51227					
Prep Date:	5/11/2018	Analysis Date:	5/13/2018	SeqNo:	1665162	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.8	49.07	0	92.8	55.8	125	22.8	20	R
Surr: DNOP	4.0		4.907		82.0	70	130	0	0	

Sample ID	MB-38069	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	38069	RunNo:	51227					
Prep Date:	5/11/2018	Analysis Date:	5/13/2018	SeqNo:	1665208	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	7.5		10.00		75.2	70	130			

Sample ID	MB-38056	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	38056	RunNo:	51235					
Prep Date:	5/10/2018	Analysis Date:	5/14/2018	SeqNo:	1666875	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	11		10.00		107	70	130			

Sample ID	LCS-38056	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	38056	RunNo:	51235					
Prep Date:	5/10/2018	Analysis Date:	5/14/2018	SeqNo:	1666887	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.7	70	130			
Surr: DNOP	5.0		5.000		99.8	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805498

29-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	LCS-38069		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics			
Client ID:	LCSS		Batch ID:	38069		RunNo:	51235			
Prep Date:	5/11/2018		Analysis Date:	5/15/2018		SeqNo:	1666995		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	89.4	70	130			
Surr: DNOP	5.2		5.000		104	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805498

29-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38032		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 38032		RunNo: 51171					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1662989		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	830		1000		83.0	15	316			

Sample ID	LCS-38032		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 38032		RunNo: 51171					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1662990		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	95.4	75.9	131			
Surr: BFB	940		1000		94.4	15	316			

Sample ID	1805498-008AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	HSW6-1		Batch ID: 38032		RunNo: 51171					
Prep Date:	5/9/2018		Analysis Date: 5/11/2018		SeqNo: 1662992		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.68	0	111	77.8	128			
Surr: BFB	1000		987.2		106	15	316			

Sample ID	1805498-008AMSD		SampType:	MSD		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	HSW6-1		Batch ID:	38032		RunNo:	51171				
Prep Date:	5/9/2018		Analysis Date:	5/11/2018		SeqNo:	1662993		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	25	4.9	24.58	0	102	77.8	128	9.31	20		
Surr: BFB	1000		983.3		102	15	316	0	0		

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805498

29-May-18

**Client:** Souder, Miller & Associates

**Project:** Candelario EMR

Sample ID <b>MB-38032</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>38032</b>		RunNo: <b>51171</b>							
Prep Date: <b>5/9/2018</b>	Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663030</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID <b>LCS-38032</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>38032</b>		RunNo: <b>51171</b>							
Prep Date: <b>5/9/2018</b>	Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663031</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.95	0.10	1.000	0	95.4	70.1	121			
Benzene	0.93	0.025	1.000	0	93.2	77.3	128			
Toluene	0.95	0.050	1.000	0	95.4	79.2	125			
Ethylbenzene	0.95	0.050	1.000	0	94.6	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	97.0	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID <b>1805498-009AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>HSW8-1</b>	Batch ID: <b>38032</b>		RunNo: <b>51171</b>							
Prep Date: <b>5/9/2018</b>	Analysis Date: <b>5/11/2018</b>		SeqNo: <b>1663034</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.91	0.095	0.9470	0	95.6	56.9	130			
Benzene	0.94	0.024	0.9470	0	99.5	68.5	133			
Toluene	1.0	0.047	0.9470	0.02017	103	75	130			
Ethylbenzene	1.0	0.047	0.9470	0.02507	104	79.4	128			
Xylenes, Total	3.0	0.095	2.841	0.05062	105	77.3	131			
Surr: 4-Bromofluorobenzene	0.99		0.9470		104	80	120			

Sample ID <b>1805498-009AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>HSW8-1</b>	Batch ID: <b>38032</b>		RunNo: <b>51171</b>							
Prep Date: <b>5/9/2018</b>	Analysis Date: <b>5/11/2018</b>		SeqNo: <b>1663035</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.94	0.098	0.9804	0	96.0	56.9	130	3.93	20	
Benzene	0.99	0.025	0.9804	0	101	68.5	133	4.45	20	
Toluene	1.0	0.049	0.9804	0.02017	103	75	130	3.31	20	
Ethylbenzene	1.0	0.049	0.9804	0.02507	104	79.4	128	3.34	20	

### 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 Quantitative 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#: 1805498

29-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID <b>1805498-009AMSD</b>		SampType: <b>MSD</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>					
Client ID: <b>HSW8-1</b>		Batch ID: <b>38032</b>			RunNo: <b>51171</b>					
Prep Date: <b>5/9/2018</b>		Analysis Date: <b>5/11/2018</b>			SeqNo: <b>1663035</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.1	0.098	2.941	0.05062	105	77.3	131	3.50	20	
Surr: 4-Bromofluorobenzene	1.0		0.9804		103	80	120	0	0	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805498

29-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	<b>lcs-38028</b>		SampType: <b>LCS4</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>					
Client ID:	<b>BatchQC</b>		Batch ID: <b>38028</b>		RunNo: <b>51185</b>					
Prep Date:	<b>5/9/2018</b>		Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663139</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	1.000	0	81.3	80	120			
Toluene	0.92	0.050	1.000	0	92.3	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Toluene-d8	0.47		0.5000		93.9	70	130			

Sample ID	<b>mb-38028</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>					
Client ID:	<b>PBS</b>		Batch ID: <b>38028</b>		RunNo: <b>51185</b>					
Prep Date:	<b>5/9/2018</b>		Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663140</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.050								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.64		0.5000		128	70	130			
Surr: Toluene-d8	0.45		0.5000		90.0	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 Quantitative 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#: 1805498

29-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	<b>lcs-38028</b>		SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>					
Client ID:	<b>LCSS</b>		Batch ID: <b>38028</b>		RunNo: <b>51185</b>					
Prep Date:	<b>5/9/2018</b>		Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663109</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.7	70	130			
Surr: BFB	510		500.0		103	70	130			

Sample ID	<b>mb-38028</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>					
Client ID:	<b>PBS</b>		Batch ID: <b>38028</b>		RunNo: <b>51185</b>					
Prep Date:	<b>5/9/2018</b>		Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663110</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	590		500.0		118	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1805498

RcptNo: 1

Received By: Isaiah Ortiz

5/9/2018 9:30:00 AM

IG

Completed By: Ashley Gallegos

5/9/2018 12:06:04 PM

AG

Reviewed By: mo

5/9/18

Labeled by: JB 05/09/18

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

## Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. 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? JB 05/09/18

Checked by: \_\_\_\_\_

## Special Handling (if applicable)

15. 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: \_\_\_\_\_

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

# Chain-of-Custody Record

Client: SMA Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush

Project Name:

Candelario EMP

Project #:

Project Manager:

Austin Weyant

Sampler:

UES PCM

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.9

Container Type and #

Preservative Type

HEAL No.

1805408

401

Sample Request ID

Date

Time

Matrix

5/2/18

10:35

Soil

H5W21

H5W2-1

H5W3

H5W4-1

H5W5

H5W7

H5W6-1

H5W8-1

H5W9

H5W10-1

H5W14

12:00

10:40

11:00

12:30

11:20

11:37

1:00

1:23

12:12

2:00

1:30

5/8/18

3:00

5/8/18

1:50

5/9/18

9:30

SP1

SP2

SP3

SP4

SP5

SP6

SP7

SP8

SP9

SP10

SP11

SP12

SP13

SP14

SP15

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SP208

SP209

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SP211

SP212

SP213

SP214

SP215

SP216

SP217

SP218

SP219

SP220

SP221

SP222

SP223

# Chain-of-Custody Record

Client: SMA - Carl'sbad

Mailing Address: \_\_\_\_\_

Phone #: \_\_\_\_\_

email or Fax#: \_\_\_\_\_

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

Accreditation ☐ NELAP ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time: ☐ Standard ☒ Rush 5 day

Project Name: Candelario ENR

Project #: \_\_\_\_\_

Project Manager: Austin Wevant

Sampler: Lucas/Blm

On Ice: ☒ Yes ☐ No

Sample Temperature: 26

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5/2/18	2:47	Rock	HBH 11-1'	Sandwich bag		1805498
	12:50		HBH 7-2.5'			-013
	1:25		HBH 8-2'			-014
	1:45		HBH 9-2.5'			-015
	3		HBH 11-1.5'			-016
	1:00		HBH 7-3'			-017
	10:40		HBH 2-2'			-018
	11:30		HBH 4-3'			-019
	11:00		HBH 3-2'			-020
	11:50		HBH 5-3'			-021
	12:07		HBH 6-3.5'			-022
	2		HBH 10-0.5'			-023
						-024

Relinquished by: Lucas Date: 5/8/18 Time: 3:00

Relinquished by: SPJ Date: 5/8/18 Time: 1900

Received by: Lucas Date: 5/8/18 Time: 1500

Received by: Lucas Date: 5/9/18 Time: 930

Remarks: rock samples in individual sandwich bags.

Rock collection



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request										
BTEX + MTBE + TMB's (8021)	<del>8021</del>	X		X						
BTEX + MTBE + TPH (Gas only)										
TPH 8015B (GRO / DRO / MRO)	<del>8015B</del>	X	X	X						
TPH (Method 418.1)	<del>418.1</del>									
EDB (Method 504.1)										
PAH's (8310 or 8270 SIMS)										
RCRA 8 Metals										
Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	X	X	X	X	X	X	X	X	X	X
8081 Pesticides / 8082 PCB's										
8260B (VOA)										
8270 (Semi-VOA)										
Air Rubbles (V or N)										

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  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 17, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario EMR W

OrderNo.: 1805501

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/9/2018 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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805501**

Date Reported: **5/17/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** POE#1

**Project:** Candelario EMR W

**Collection Date:** 5/7/2018 9:30:00 AM

**Lab ID:** 1805501-001

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/11/2018 10:33:16 AM	R51222
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4610	40.0	*D	mg/L	1	5/11/2018 12:48:00 PM	38053
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/14/2018 12:57:58 PM	A51264
Surr: BFB	102	70-130		%Rec	1	5/14/2018 12:57:58 PM	A51264
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/15/2018 7:35:43 AM	38072
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/15/2018 7:35:43 AM	38072
Surr: DNOP	129	76.7-135		%Rec	1	5/15/2018 7:35:43 AM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/14/2018 12:57:58 PM	C51264
Toluene	ND	1.0		µg/L	1	5/14/2018 12:57:58 PM	C51264
Ethylbenzene	ND	1.0		µg/L	1	5/14/2018 12:57:58 PM	C51264
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/14/2018 12:57:58 PM	C51264
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/14/2018 12:57:58 PM	C51264
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/14/2018 12:57:58 PM	C51264
Xylenes, Total	ND	1.5		µg/L	1	5/14/2018 12:57:58 PM	C51264
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	5/14/2018 12:57:58 PM	C51264
Surr: Toluene-d8	99.0	70-130		%Rec	1	5/14/2018 12:57:58 PM	C51264

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 9
	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 Quantitative 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.

## Analytical Report

Lab Order **1805501**

Date Reported: **5/17/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** POE#2

**Project:** Candelario EMR W

**Collection Date:** 5/7/2018 9:45:00 AM

**Lab ID:** 1805501-002

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/11/2018 10:59:00 AM	R51222
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4580	40.0	*D	mg/L	1	5/11/2018 12:48:00 PM	38053

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805501**

Date Reported: **5/17/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Upstream

**Project:** Candelario EMR W

**Collection Date:** 5/7/2018 9:55:00 AM

**Lab ID:** 1805501-003

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1400	50	*	mg/L	100	5/11/2018 11:24:42 AM	R51222
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4980	40.0	*D	mg/L	1	5/11/2018 12:48:00 PM	38053
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/14/2018 1:21:01 PM	A51264
Surr: BFB	106	70-130		%Rec	1	5/14/2018 1:21:01 PM	A51264
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/15/2018 7:57:49 AM	38072
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/15/2018 7:57:49 AM	38072
Surr: DNOP	137	76.7-135	S	%Rec	1	5/15/2018 7:57:49 AM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/14/2018 1:21:01 PM	C51264
Toluene	ND	1.0		µg/L	1	5/14/2018 1:21:01 PM	C51264
Ethylbenzene	ND	1.0		µg/L	1	5/14/2018 1:21:01 PM	C51264
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/14/2018 1:21:01 PM	C51264
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/14/2018 1:21:01 PM	C51264
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/14/2018 1:21:01 PM	C51264
Xylenes, Total	ND	1.5		µg/L	1	5/14/2018 1:21:01 PM	C51264
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	5/14/2018 1:21:01 PM	C51264
Surr: Toluene-d8	99.8	70-130		%Rec	1	5/14/2018 1:21:01 PM	C51264

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 9
	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 Quantitative 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.

## Analytical Report

Lab Order **1805501**

Date Reported: **5/17/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Downstream

**Project:** Candelario EMR W

**Collection Date:** 5/7/2018 10:10:00 AM

**Lab ID:** 1805501-004

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1300	50	*	mg/L	100	5/11/2018 11:50:26 AM	R51222
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4610	40.0	*D	mg/L	1	5/11/2018 12:48:00 PM	38053

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 9
	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 Quantitative 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#: 1805501

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID <b>MB</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R51222</b>		RunNo: <b>51222</b>							
Prep Date:	Analysis Date: <b>5/11/2018</b>		SeqNo: <b>1664966</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID <b>LCS</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R51222</b>		RunNo: <b>51222</b>							
Prep Date:	Analysis Date: <b>5/11/2018</b>		SeqNo: <b>1664967</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.5	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805501

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	MB-38072		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 38072		RunNo: 51235					
Prep Date:	5/11/2018		Analysis Date: 5/15/2018		SeqNo: 1667033		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		124	76.7	135			

Sample ID	LCS-38072		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 38072		RunNo: 51235					
Prep Date:	5/11/2018		Analysis Date: 5/15/2018		SeqNo: 1667034		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.5	70	130			
Surr: DNOP	0.57		0.5000		115	76.7	135			

### 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 Quantitative 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#: 1805501

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID: C51264			RunNo: 51264					
Prep Date:		Analysis Date: 5/14/2018			SeqNo: 1666393		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Toluene-d8	10		10.00		102	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 Quantitative 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#: 1805501

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	A51264	RunNo:	51264					
Prep Date:		Analysis Date:	5/14/2018	SeqNo:	1666370	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	91.4	70	130			
Surr: BFB	9.2		10.00		92.0	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	A51264	RunNo:	51264					
Prep Date:		Analysis Date:	5/14/2018	SeqNo:	1666372	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	10		10.00		103	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805501

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	MB-38053		SampType:	MBLK		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	PBW		Batch ID:	38053		RunNo:	51208				
Prep Date:	5/10/2018		Analysis Date:	5/11/2018		SeqNo:	1664365		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids	ND	20.0									

Sample ID	LCS-38053		SampType: LCS		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW		Batch ID: 38053		RunNo: 51208					
Prep Date:	5/10/2018		Analysis Date: 5/11/2018		SeqNo: 1664366		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	995	20.0	1000	0	99.5	80	120			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1805501

RcptNo: 1

Received By: Isaiah Ortiz

5/9/2018 9:30:00 AM

Completed By: Ashley Gallegos

5/9/2018 12:21:20 PM

Reviewed By: *IMO*

5/9/18

Labeled by: *LB*

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

## Log In

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

# of preserved bottles checked for pH: *10*  
(-2 for E12 unless noted)  
Adjusted? *6*  
Checked by: \_\_\_\_\_

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

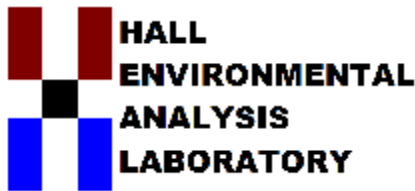
16. Additional remarks: *Both vials from POG #2 were received broken*  
*One vial from down stream received broken*

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Yes			

- LB 5/9/18





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

May 17, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario EMR W

OrderNo.: 1805503

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/9/2018 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](http://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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1805503

Date Reported: 5/17/2018

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** POE#1

**Project:** Candelario EMR W

**Collection Date:** 5/2/2018 10:07:00 AM

**Lab ID:** 1805503-001

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/14/2018 10:55:23 AM	R51273
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4700	20.0	*	mg/L	1	5/10/2018 5:00:00 PM	38029
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 10:14:10 AM	A51228
Surr: BFB	108	70-130		%Rec	1	5/11/2018 10:14:10 AM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0	H	mg/L	1	5/15/2018 8:19:55 AM	38072
Motor Oil Range Organics (MRO)	ND	5.0	H	mg/L	1	5/15/2018 8:19:55 AM	38072
Surr: DNOP	119	76.7-135	H	%Rec	1	5/15/2018 8:19:55 AM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 10:14:10 AM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 10:14:10 AM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 10:14:10 AM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 10:14:10 AM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 10:14:10 AM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 10:14:10 AM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 10:14:10 AM	C51228
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	5/11/2018 10:14:10 AM	C51228
Surr: Toluene-d8	100	70-130		%Rec	1	5/11/2018 10:14:10 AM	C51228

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

Analytical Report

Lab Order 1805503

Date Reported: 5/17/2018

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** POE#2

**Project:** Candelario EMR W

**Collection Date:** 5/2/2018 10:22:00 AM

**Lab ID:** 1805503-002

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/14/2018 11:21:06 AM	R51273
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4770	20.0	*	mg/L	1	5/10/2018 5:00:00 PM	38029
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 10:37:13 AM	A51228
Surr: BFB	105	70-130		%Rec	1	5/11/2018 10:37:13 AM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0	H	mg/L	1	5/15/2018 11:05:12 AM	38072
Motor Oil Range Organics (MRO)	ND	5.0	H	mg/L	1	5/15/2018 11:05:12 AM	38072
Surr: DNOP	120	76.7-135	H	%Rec	1	5/15/2018 11:05:12 AM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 10:37:13 AM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 10:37:13 AM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 10:37:13 AM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 10:37:13 AM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 10:37:13 AM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 10:37:13 AM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 10:37:13 AM	C51228
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	5/11/2018 10:37:13 AM	C51228
Surr: Toluene-d8	103	70-130		%Rec	1	5/11/2018 10:37:13 AM	C51228

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805503**

Date Reported: **5/17/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Upstream

**Project:** Candelario EMR W

**Collection Date:** 5/2/2018 10:45:00 AM

**Lab ID:** 1805503-003

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/14/2018 11:46:50 AM	R51273
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4720	20.0	*	mg/L	1	5/10/2018 5:00:00 PM	38029
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 11:00:20 AM	A51228
Surr: BFB	103	70-130		%Rec	1	5/11/2018 11:00:20 AM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0	H	mg/L	1	5/15/2018 11:27:25 AM	38072
Motor Oil Range Organics (MRO)	ND	5.0	H	mg/L	1	5/15/2018 11:27:25 AM	38072
Surr: DNOP	124	76.7-135	H	%Rec	1	5/15/2018 11:27:25 AM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 11:00:20 AM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 11:00:20 AM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 11:00:20 AM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 11:00:20 AM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 11:00:20 AM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 11:00:20 AM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 11:00:20 AM	C51228
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	1	5/11/2018 11:00:20 AM	C51228
Surr: Toluene-d8	101	70-130		%Rec	1	5/11/2018 11:00:20 AM	C51228

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805503**

Date Reported: **5/17/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Downstream

**Project:** Candelario EMR W

**Collection Date:** 5/2/2018 10:32:00 AM

**Lab ID:** 1805503-004

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/14/2018 12:12:34 PM	R51273
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4760	20.0	*	mg/L	1	5/10/2018 5:00:00 PM	38029
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 11:23:25 AM	A51228
Surr: BFB	104	70-130		%Rec	1	5/11/2018 11:23:25 AM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0	H	mg/L	1	5/15/2018 11:49:38 AM	38072
Motor Oil Range Organics (MRO)	ND	5.0	H	mg/L	1	5/15/2018 11:49:38 AM	38072
Surr: DNOP	115	76.7-135	H	%Rec	1	5/15/2018 11:49:38 AM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 11:23:25 AM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 11:23:25 AM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 11:23:25 AM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 11:23:25 AM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 11:23:25 AM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 11:23:25 AM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 11:23:25 AM	C51228
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	5/11/2018 11:23:25 AM	C51228
Surr: Toluene-d8	99.7	70-130		%Rec	1	5/11/2018 11:23:25 AM	C51228

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805503

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID <b>MB</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R51273</b>		RunNo: <b>51273</b>							
Prep Date:	Analysis Date: <b>5/14/2018</b>		SeqNo: <b>1666732</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID <b>LCS</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R51273</b>		RunNo: <b>51273</b>							
Prep Date:	Analysis Date: <b>5/14/2018</b>		SeqNo: <b>1666733</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	91.8	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805503

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	MB-38072		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 38072		RunNo: 51235					
Prep Date:	5/11/2018		Analysis Date: 5/15/2018		SeqNo: 1667033		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		124	76.7	135			

Sample ID	LCS-38072		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range				
Client ID:	LCSW		Batch ID:	38072		RunNo:	51235				
Prep Date:	5/11/2018		Analysis Date:	5/15/2018		SeqNo:	1667034		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.5	70	130				
Surr: DNOP	0.57		0.5000		115	76.7	135				

### 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 Quantitative 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#: 1805503

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	100ng lcs	SampType:	LCS4	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	BatchQC	Batch ID:	C51228	RunNo:	51228					
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665319	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.2	80	120			
Toluene	19	1.0	20.00	0	96.7	80	120			
Ethylbenzene	20	1.0	20.00	0	99.5	80	120			
Methyl tert-butyl ether (MTBE)	18	1.0	20.00	0	89.2	80	120			
1,2,4-Trimethylbenzene	20	1.0	20.00	0	102	80	120			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.6	80	120			
Xylenes, Total	59	1.5	60.00	0	97.9	80	120			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	C51228	RunNo:	51228					
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665345	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID	1805503-002ams	SampType:	MS4	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	POE#2	Batch ID:	C51228	RunNo:	51228					
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665890	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.5	80	120			
Toluene	20	1.0	20.00	0.07180	101	80	120			
Ethylbenzene	20	1.0	20.00	0	102	80	120			
Methyl tert-butyl ether (MTBE)	13	1.0	20.00	0.3734	62.9	80	120			S
1,2,4-Trimethylbenzene	21	1.0	20.00	0	105	80	120			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.8	80	120			
Xylenes, Total	58	1.5	60.00	0.3898	96.4	80	120			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.7	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805503

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	1805503-002amsd	SampType: MSD4			TestCode: EPA Method 8260: Volatiles Short List					
Client ID:	POE#2	Batch ID: C51228			RunNo: 51228					
Prep Date:		Analysis Date: 5/11/2018			SeqNo: 1665891		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.9	80	120	1.75	20	
Toluene	20	1.0	20.00	0.07180	98.9	80	120	2.30	20	
Ethylbenzene	20	1.0	20.00	0	100	80	120	2.06	20	
Methyl tert-butyl ether (MTBE)	13	1.0	20.00	0.3734	63.6	80	120	1.12	20	S
1,2,4-Trimethylbenzene	21	1.0	20.00	0	104	80	120	1.19	20	
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.5	80	120	0.283	20	
Xylenes, Total	59	1.5	60.00	0.3898	97.8	80	120	1.44	20	
Surr: 4-Bromofluorobenzene	9.6		10.00		96.0	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805503

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	2.5ug gro lcs		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: A51228		RunNo: 51228					
Prep Date:			Analysis Date: 5/11/2018		SeqNo: 1665264		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.6	70	130			
Surr: BFB	9.3		10.00		92.9	70	130			

Sample ID	2.5ug gro lcs2		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: B51228		RunNo: 51228					
Prep Date:			Analysis Date: 5/11/2018		SeqNo: 1665265		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	9.2		10.00		91.6	70	130			

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID: A51228			RunNo: 51228					
Prep Date:		Analysis Date: 5/11/2018			SeqNo: 1665266		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	10		10.00		101	70	130			

Sample ID	rb2	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID: B51228			RunNo: 51228					
Prep Date:		Analysis Date: 5/11/2018			SeqNo: 1665267		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	10		10.00		104	70	130			

Sample ID	1805503-001ams		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	POE#1		Batch ID: A51228		RunNo: 51228					
Prep Date:			Analysis Date: 5/11/2018		SeqNo: 1665825		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	102	70	130			
Surr: BFB	10		10.00		102	70	130			

Sample ID	1805503-001amsd		SampType:	MSD		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	POE#1		Batch ID:	A51228		RunNo:	51228				
Prep Date:			Analysis Date:	5/11/2018		SeqNo:	1665826		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	0.47	0.050	0.5000	0	94.9	70	130	7.51	20		
Surr: BFB	9.5		10.00		95.2	70	130	0	0		

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805503

17-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	MB-38029		SampType:	MBLK		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	PBW		Batch ID:	38029		RunNo:	51182				
Prep Date:	5/9/2018		Analysis Date:	5/10/2018		SeqNo:	1662892		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids	ND	20.0									

Sample ID	LCS-38029		SampType:	LCS		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	LCSW		Batch ID:	38029		RunNo:	51182				
Prep Date:	5/9/2018		Analysis Date:	5/10/2018		SeqNo:	1662893		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids	1010	20.0	1000	0	101	80	120				

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1805503

RcptNo: 1

Received By: Isaiah Ortiz

5/9/2018 9:30:00 AM

IO

Completed By: Ashley Gallegos

5/9/2018 12:25:56 PM

AG

Reviewed By: IO

5/9/18

Labeled by:

LF

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

## Log In

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

# of preserved bottles checked for pH: 9  
( $<2$  or  $>12$  unless noted)

Adjusted? ☒

Checked by: \_\_\_\_\_

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.9	Good	Yes			







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

May 22, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario EMR W

OrderNo.: 1805504

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/9/2018 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](http://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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1805504

Date Reported: 5/22/2018

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** POE#1

**Project:** Candelario EMR W

**Collection Date:** 5/3/2018 10:27:00 AM

**Lab ID:** 1805504-001

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/14/2018 11:03:56 AM	R51270
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4770	20.0	*	mg/L	1	5/10/2018 5:00:00 PM	38029
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 1:18:43 PM	A51228
Surr: BFB	103	70-130		%Rec	1	5/11/2018 1:18:43 PM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0	H	mg/L	1	5/15/2018 12:11:42 PM	38072
Motor Oil Range Organics (MRO)	ND	5.0	H	mg/L	1	5/15/2018 12:11:42 PM	38072
Surr: DNOP	115	76.7-135	H	%Rec	1	5/15/2018 12:11:42 PM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 1:18:43 PM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 1:18:43 PM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 1:18:43 PM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 1:18:43 PM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 1:18:43 PM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 1:18:43 PM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 1:18:43 PM	C51228
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	1	5/11/2018 1:18:43 PM	C51228
Surr: Toluene-d8	96.4	70-130		%Rec	1	5/11/2018 1:18:43 PM	C51228

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 9
	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 Quantitative 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.

## Analytical Report

Lab Order **1805504**Date Reported: **5/22/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** POE#2**Project:** Candelario EMR W**Collection Date:** 5/3/2018 10:15:00 AM**Lab ID:** 1805504-002**Matrix:** AQUEOUS**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/14/2018 11:28:45 AM	R51270
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4700	20.0	*	mg/L	1	5/10/2018 5:00:00 PM	38029
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 1:41:50 PM	A51228
Surr: BFB	107	70-130		%Rec	1	5/11/2018 1:41:50 PM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0	H	mg/L	1	5/15/2018 12:34:01 PM	38072
Motor Oil Range Organics (MRO)	ND	5.0	H	mg/L	1	5/15/2018 12:34:01 PM	38072
Surr: DNOP	111	76.7-135	H	%Rec	1	5/15/2018 12:34:01 PM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 1:41:50 PM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 1:41:50 PM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 1:41:50 PM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 1:41:50 PM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 1:41:50 PM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 1:41:50 PM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 1:41:50 PM	C51228
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	5/11/2018 1:41:50 PM	C51228
Surr: Toluene-d8	103	70-130		%Rec	1	5/11/2018 1:41:50 PM	C51228

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

Analytical Report

Lab Order 1805504

Date Reported: 5/22/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: Upstream

Project: Candelario EMR W

Collection Date: 5/3/2018 10:55:00 AM

Lab ID: 1805504-003

Matrix: AQUEOUS

Received Date: 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1100	50	*	mg/L	100	5/14/2018 11:53:35 AM	R51270
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4990	20.0	*	mg/L	1	5/10/2018 5:00:00 PM	38029
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 2:04:55 PM	A51228
Surr: BFB	106	70-130		%Rec	1	5/11/2018 2:04:55 PM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0	H	mg/L	1	5/15/2018 12:56:06 PM	38072
Motor Oil Range Organics (MRO)	ND	5.0	H	mg/L	1	5/15/2018 12:56:06 PM	38072
Surr: DNOP	112	76.7-135	H	%Rec	1	5/15/2018 12:56:06 PM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 2:04:55 PM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 2:04:55 PM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 2:04:55 PM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 2:04:55 PM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 2:04:55 PM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 2:04:55 PM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 2:04:55 PM	C51228
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	5/11/2018 2:04:55 PM	C51228
Surr: Toluene-d8	102	70-130		%Rec	1	5/11/2018 2:04:55 PM	C51228

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 9
	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 Quantitative 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.

## Analytical Report

Lab Order **1805504**

Date Reported: **5/22/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Downstream

**Project:** Candelario EMR W

**Collection Date:** 5/3/2018 11:18:00 AM

**Lab ID:** 1805504-004

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1400	50	*	mg/L	100	5/14/2018 12:18:23 PM	R51270
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4740	20.0	*	mg/L	1	5/10/2018 5:00:00 PM	38029
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 2:28:06 PM	A51228
Surr: BFB	108	70-130		%Rec	1	5/11/2018 2:28:06 PM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0	H	mg/L	1	5/15/2018 1:18:20 PM	38072
Motor Oil Range Organics (MRO)	ND	5.0	H	mg/L	1	5/15/2018 1:18:20 PM	38072
Surr: DNOP	112	76.7-135	H	%Rec	1	5/15/2018 1:18:20 PM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 2:28:06 PM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 2:28:06 PM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 2:28:06 PM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 2:28:06 PM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 2:28:06 PM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 2:28:06 PM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 2:28:06 PM	C51228
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	5/11/2018 2:28:06 PM	C51228
Surr: Toluene-d8	104	70-130		%Rec	1	5/11/2018 2:28:06 PM	C51228

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 9
	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 Quantitative 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#: 1805504

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID <b>MB</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R51270</b>		RunNo: <b>51270</b>							
Prep Date:	Analysis Date: <b>5/14/2018</b>		SeqNo: <b>1666618</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID <b>LCS</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R51270</b>		RunNo: <b>51270</b>							
Prep Date:	Analysis Date: <b>5/14/2018</b>		SeqNo: <b>1666619</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.1	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805504

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	MB-38072		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 38072		RunNo: 51235					
Prep Date:	5/11/2018		Analysis Date: 5/15/2018		SeqNo: 1667033		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		124	76.7	135			

Sample ID	LCS-38072		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 38072		RunNo: 51235					
Prep Date:	5/11/2018		Analysis Date: 5/15/2018		SeqNo: 1667034		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.5	70	130			
Surr: DNOP	0.57		0.5000		115	76.7	135			

### 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 Quantitative 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#: 1805504

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	100ng lcs	SampType:	LCS4	TestCode:	EPA Method 8260: Volatiles Short List						
Client ID:	BatchQC	Batch ID:	C51228	RunNo:	51228						
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665319	Units:	µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	19	1.0	20.00	0	93.2	80	120				
Toluene	19	1.0	20.00	0	96.7	80	120				
Ethylbenzene	20	1.0	20.00	0	99.5	80	120				
Methyl tert-butyl ether (MTBE)	18	1.0	20.00	0	89.2	80	120				
1,2,4-Trimethylbenzene	20	1.0	20.00	0	102	80	120				
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.6	80	120				
Xylenes, Total	59	1.5	60.00	0	97.9	80	120				
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130				
Surr: Toluene-d8	10		10.00		103	70	130				

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List						
Client ID:	PBW	Batch ID:	C51228	RunNo:	51228						
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665345	Units:	µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
Xylenes, Total	ND	1.5									
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130				
Surr: Toluene-d8	9.4		10.00		94.3	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 Quantitative 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#: 1805504

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	A51228	RunNo:	51228					
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665264	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.6	70	130			
Surr: BFB	9.3		10.00		92.9	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	A51228	RunNo:	51228					
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665266	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	10		10.00		101	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805504

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	MB-38029		SampType: MBLK		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW		Batch ID: 38029		RunNo: 51182					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1662892		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-38029		SampType: LCS		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW		Batch ID: 38029		RunNo: 51182					
Prep Date:	5/9/2018		Analysis Date: 5/10/2018		SeqNo: 1662893		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1805504

RcptNo: 1

Received By: Isaiah Ortiz

5/9/2018 9:30:00 AM

Completed By: Ashley Gallegos

5/9/2018 12:28:48 PM

Reviewed By: IO

5/9/18

Labeled by:

LB

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

## Log In

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

# of preserved bottles checked for pH: 10  
(<2 for 12 unless noted)

Adjusted?

Checked by:

## Special Handling (if applicable)

15. 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:

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			





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

May 22, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario EMR W

OrderNo.: 1805506

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/9/2018 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](http://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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805506**

Date Reported: **5/22/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** POE#1

**Project:** Candelario EMR W

**Collection Date:** 5/4/2018 10:09:00 AM

**Lab ID:** 1805506-001

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1300	50	*	mg/L	100	5/11/2018 12:41:51 PM	R51222
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4600	40.0	*D	mg/L	1	5/11/2018 12:48:00 PM	38053
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 2:51:13 PM	A51228
Surr: BFB	109	70-130		%Rec	1	5/11/2018 2:51:13 PM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/15/2018 1:40:19 PM	38072
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/15/2018 1:40:19 PM	38072
Surr: DNOP	113	76.7-135		%Rec	1	5/15/2018 1:40:19 PM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 2:51:13 PM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 2:51:13 PM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 2:51:13 PM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 2:51:13 PM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 2:51:13 PM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 2:51:13 PM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 2:51:13 PM	C51228
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	5/11/2018 2:51:13 PM	C51228
Surr: Toluene-d8	101	70-130		%Rec	1	5/11/2018 2:51:13 PM	C51228

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 9
	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 Quantitative 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.

Analytical Report

Lab Order 1805506

Date Reported: 5/22/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: POE#2

Project: Candelario EMR W

Collection Date: 5/4/2018 10:17:00 AM

Lab ID: 1805506-002

Matrix: AQUEOUS

Received Date: 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50	*	mg/L	100	5/11/2018 1:07:35 PM	R51222
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4520	40.0	*D	mg/L	1	5/11/2018 12:48:00 PM	38053
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 3:14:18 PM	A51228
Surr: BFB	107	70-130		%Rec	1	5/11/2018 3:14:18 PM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/15/2018 2:02:30 PM	38072
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/15/2018 2:02:30 PM	38072
Surr: DNOP	117	76.7-135		%Rec	1	5/15/2018 2:02:30 PM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 3:14:18 PM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 3:14:18 PM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 3:14:18 PM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 3:14:18 PM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 3:14:18 PM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 3:14:18 PM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 3:14:18 PM	C51228
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	5/11/2018 3:14:18 PM	C51228
Surr: Toluene-d8	101	70-130		%Rec	1	5/11/2018 3:14:18 PM	C51228

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 9
	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 Quantitative 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.

## Analytical Report

Lab Order **1805506**Date Reported: **5/22/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** Upstream**Project:** Candelario EMR W**Collection Date:** 5/4/2018 10:39:00 AM**Lab ID:** 1805506-003**Matrix:** AQUEOUS**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1300	50	*	mg/L	100	5/14/2018 1:08:01 PM	R51270
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4770	40.0	*D	mg/L	1	5/11/2018 12:48:00 PM	38053
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 3:37:22 PM	A51228
Surr: BFB	106	70-130		%Rec	1	5/11/2018 3:37:22 PM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/15/2018 2:24:30 PM	38072
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/15/2018 2:24:30 PM	38072
Surr: DNOP	117	76.7-135		%Rec	1	5/15/2018 2:24:30 PM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 3:37:22 PM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 3:37:22 PM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 3:37:22 PM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 3:37:22 PM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 3:37:22 PM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 3:37:22 PM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 3:37:22 PM	C51228
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	5/11/2018 3:37:22 PM	C51228
Surr: Toluene-d8	103	70-130		%Rec	1	5/11/2018 3:37:22 PM	C51228

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

Analytical Report

Lab Order 1805506

Date Reported: 5/22/2018

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Downstream

**Project:** Candelario EMR W

**Collection Date:** 5/4/2018 10:24:00 AM

**Lab ID:** 1805506-004

**Matrix:** AQUEOUS

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1300	50	*	mg/L	100	5/14/2018 1:32:50 PM	R51270
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>sat</b>
Total Dissolved Solids	4630	40.0	*D	mg/L	1	5/11/2018 12:48:00 PM	38053
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/11/2018 4:00:36 PM	A51228
Surr: BFB	110	70-130		%Rec	1	5/11/2018 4:00:36 PM	A51228
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/15/2018 2:46:38 PM	38072
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/15/2018 2:46:38 PM	38072
Surr: DNOP	122	76.7-135		%Rec	1	5/15/2018 2:46:38 PM	38072
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Benzene	ND	1.0		µg/L	1	5/11/2018 4:00:36 PM	C51228
Toluene	ND	1.0		µg/L	1	5/11/2018 4:00:36 PM	C51228
Ethylbenzene	ND	1.0		µg/L	1	5/11/2018 4:00:36 PM	C51228
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2018 4:00:36 PM	C51228
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 4:00:36 PM	C51228
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2018 4:00:36 PM	C51228
Xylenes, Total	ND	1.5		µg/L	1	5/11/2018 4:00:36 PM	C51228
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	5/11/2018 4:00:36 PM	C51228
Surr: Toluene-d8	102	70-130		%Rec	1	5/11/2018 4:00:36 PM	C51228

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 9
	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 Quantitative 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#: 1805506

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	<b>MB</b>	SampType:	<b>mblk</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBW</b>	Batch ID:	<b>R51222</b>	RunNo:	<b>51222</b>					
Prep Date:		Analysis Date:	<b>5/11/2018</b>	SeqNo:	<b>1664966</b>	Units:	<b>mg/L</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	<b>LCS</b>	SampType:	<b>lcs</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSW</b>	Batch ID:	<b>R51222</b>	RunNo:	<b>51222</b>					
Prep Date:		Analysis Date:	<b>5/11/2018</b>	SeqNo:	<b>1664967</b>	Units:	<b>mg/L</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.5	90	110			

Sample ID	<b>MB</b>	SampType:	<b>mblk</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBW</b>	Batch ID:	<b>R51270</b>	RunNo:	<b>51270</b>					
Prep Date:		Analysis Date:	<b>5/14/2018</b>	SeqNo:	<b>1666618</b>	Units:	<b>mg/L</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	<b>LCS</b>	SampType:	<b>lcs</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSW</b>	Batch ID:	<b>R51270</b>	RunNo:	<b>51270</b>					
Prep Date:		Analysis Date:	<b>5/14/2018</b>	SeqNo:	<b>1666619</b>	Units:	<b>mg/L</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.1	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805506

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	MB-38072		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 38072		RunNo: 51235					
Prep Date:	5/11/2018		Analysis Date: 5/15/2018		SeqNo: 1667033		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		124	76.7	135			

Sample ID	LCS-38072		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 38072		RunNo: 51235					
Prep Date:	5/11/2018		Analysis Date: 5/15/2018		SeqNo: 1667034		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.5	70	130			
Surr: DNOP	0.57		0.5000		115	76.7	135			

### 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 Quantitative 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#: 1805506

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	100ng lcs	SampType:	LCS4	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	BatchQC	Batch ID:	C51228	RunNo:	51228					
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665319	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.2	80	120			
Toluene	19	1.0	20.00	0	96.7	80	120			
Ethylbenzene	20	1.0	20.00	0	99.5	80	120			
Methyl tert-butyl ether (MTBE)	18	1.0	20.00	0	89.2	80	120			
1,2,4-Trimethylbenzene	20	1.0	20.00	0	102	80	120			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.6	80	120			
Xylenes, Total	59	1.5	60.00	0	97.9	80	120			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	C51228	RunNo:	51228					
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665345	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	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 Quantitative 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#: 1805506

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	A51228	RunNo:	51228					
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665264	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.6	70	130			
Surr: BFB	9.3		10.00		92.9	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	A51228	RunNo:	51228					
Prep Date:		Analysis Date:	5/11/2018	SeqNo:	1665266	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	10		10.00		101	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 Quantitative 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#: 1805506

22-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR W

Sample ID	MB-38053		SampType: MBLK		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW		Batch ID: 38053		RunNo: 51208					
Prep Date:	5/10/2018		Analysis Date: 5/11/2018		SeqNo: 1664365		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-38053		SampType:	LCS		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	LCSW		Batch ID:	38053		RunNo:	51208				
Prep Date:	5/10/2018		Analysis Date:	5/11/2018		SeqNo:	1664366		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids	995	20.0	1000	0	99.5	80	120				

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



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-CARLSBAD

Work Order Number: 1805506

RcptNo: 1

Received By: Isaiah Ortiz

5/9/2018 9:30:00 AM

Completed By: Ashley Gallegos

5/9/2018 12:34:27 PM

Reviewed By: MW 5/9/18

Labeled by: IO

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

### Log In

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

# of preserved  
bottles checked  
for pH: IO 5/16  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			







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4901 Hawkins NE  
Albuquerque, NM 87109  
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Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 21, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario EMR

OrderNo.: 1805508

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 7 sample(s) on 5/9/2018 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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805508**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L8-0.5'

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 10:00:00 AM

**Lab ID:** 1805508-001

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	160	30		mg/Kg	20	5/15/2018 9:31:12 PM	38134
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/10/2018 5:38:39 PM	38028
Surr: BFB	119	70-130		%Rec	1	5/10/2018 5:38:39 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/13/2018 3:40:58 AM	38069
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/13/2018 3:40:58 AM	38069
Surr: DNOP	86.6	70-130		%Rec	1	5/13/2018 3:40:58 AM	38069
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	5/10/2018 5:38:39 PM	38028
Benzene	ND	0.024		mg/Kg	1	5/10/2018 5:38:39 PM	38028
Toluene	ND	0.049		mg/Kg	1	5/10/2018 5:38:39 PM	38028
Ethylbenzene	ND	0.049		mg/Kg	1	5/10/2018 5:38:39 PM	38028
Xylenes, Total	ND	0.097		mg/Kg	1	5/10/2018 5:38:39 PM	38028
Surr: 4-Bromofluorobenzene	130	70-130		%Rec	1	5/10/2018 5:38:39 PM	38028
Surr: Toluene-d8	95.1	70-130		%Rec	1	5/10/2018 5:38:39 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805508**Date Reported: **5/21/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** L1-0.5'**Project:** Candelario EMR**Collection Date:** 5/3/2018 11:00:00 AM**Lab ID:** 1805508-002**Matrix:** SOIL**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	850	30		mg/Kg	20	5/15/2018 9:43:37 PM	38134
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/10/2018 6:01:54 PM	38028
Surr: BFB	128	70-130		%Rec	1	5/10/2018 6:01:54 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/13/2018 4:03:25 AM	38069
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/13/2018 4:03:25 AM	38069
Surr: DNOP	90.9	70-130		%Rec	1	5/13/2018 4:03:25 AM	38069
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	5/10/2018 6:01:54 PM	38028
Benzene	ND	0.024		mg/Kg	1	5/10/2018 6:01:54 PM	38028
Toluene	ND	0.048		mg/Kg	1	5/10/2018 6:01:54 PM	38028
Ethylbenzene	ND	0.048		mg/Kg	1	5/10/2018 6:01:54 PM	38028
Xylenes, Total	ND	0.097		mg/Kg	1	5/10/2018 6:01:54 PM	38028
Surr: 4-Bromofluorobenzene	139	70-130	S	%Rec	1	5/10/2018 6:01:54 PM	38028
Surr: Toluene-d8	94.1	70-130		%Rec	1	5/10/2018 6:01:54 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805508**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L7-0.5'

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 9:50:00 AM

**Lab ID:** 1805508-003

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	4200	150		mg/Kg	100	5/16/2018 11:27:43 AM	38134
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/10/2018 6:25:05 PM	38028
Surr: BFB	117	70-130		%Rec	1	5/10/2018 6:25:05 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	15	9.6		mg/Kg	1	5/13/2018 4:25:35 AM	38069
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/13/2018 4:25:35 AM	38069
Surr: DNOP	101	70-130		%Rec	1	5/13/2018 4:25:35 AM	38069
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.047		mg/Kg	1	5/10/2018 6:25:05 PM	38028
Benzene	ND	0.024		mg/Kg	1	5/10/2018 6:25:05 PM	38028
Toluene	ND	0.047		mg/Kg	1	5/10/2018 6:25:05 PM	38028
Ethylbenzene	ND	0.047		mg/Kg	1	5/10/2018 6:25:05 PM	38028
Xylenes, Total	ND	0.095		mg/Kg	1	5/10/2018 6:25:05 PM	38028
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	5/10/2018 6:25:05 PM	38028
Surr: Toluene-d8	94.4	70-130		%Rec	1	5/10/2018 6:25:05 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805508**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L4-1

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 11:20:00 AM

**Lab ID:** 1805508-004

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	19000	750		mg/Kg	500	5/16/2018 11:40:07 AM	38135
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/10/2018 6:48:17 PM	38028
Surr: BFB	114	70-130		%Rec	1	5/10/2018 6:48:17 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/13/2018 4:47:58 AM	38069
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/13/2018 4:47:58 AM	38069
Surr: DNOP	92.8	70-130		%Rec	1	5/13/2018 4:47:58 AM	38069
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/10/2018 6:48:17 PM	38028
Benzene	ND	0.025		mg/Kg	1	5/10/2018 6:48:17 PM	38028
Toluene	ND	0.050		mg/Kg	1	5/10/2018 6:48:17 PM	38028
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2018 6:48:17 PM	38028
Xylenes, Total	ND	0.099		mg/Kg	1	5/10/2018 6:48:17 PM	38028
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	5/10/2018 6:48:17 PM	38028
Surr: Toluene-d8	91.6	70-130		%Rec	1	5/10/2018 6:48:17 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805508**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L2-1.5'

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 10:37:00 AM

**Lab ID:** 1805508-005

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	320	30		mg/Kg	20	5/15/2018 11:10:30 PM	38135
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/10/2018 7:11:21 PM	38028
Surr: BFB	114	70-130		%Rec	1	5/10/2018 7:11:21 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/13/2018 5:10:17 AM	38069
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/13/2018 5:10:17 AM	38069
Surr: DNOP	96.9	70-130		%Rec	1	5/13/2018 5:10:17 AM	38069
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	5/10/2018 7:11:21 PM	38028
Benzene	ND	0.024		mg/Kg	1	5/10/2018 7:11:21 PM	38028
Toluene	ND	0.048		mg/Kg	1	5/10/2018 7:11:21 PM	38028
Ethylbenzene	ND	0.048		mg/Kg	1	5/10/2018 7:11:21 PM	38028
Xylenes, Total	ND	0.096		mg/Kg	1	5/10/2018 7:11:21 PM	38028
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	5/10/2018 7:11:21 PM	38028
Surr: Toluene-d8	94.7	70-130		%Rec	1	5/10/2018 7:11:21 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805508**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L9-West-0.5'

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 10:30:00 AM

**Lab ID:** 1805508-006

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	8000	750		mg/Kg	500	5/16/2018 11:52:31 AM	38135
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/10/2018 7:34:28 PM	38028
Surr: BFB	116	70-130		%Rec	1	5/10/2018 7:34:28 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/13/2018 5:32:34 AM	38069
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/13/2018 5:32:34 AM	38069
Surr: DNOP	96.6	70-130		%Rec	1	5/13/2018 5:32:34 AM	38069
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/10/2018 7:34:28 PM	38028
Benzene	ND	0.025		mg/Kg	1	5/10/2018 7:34:28 PM	38028
Toluene	ND	0.050		mg/Kg	1	5/10/2018 7:34:28 PM	38028
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2018 7:34:28 PM	38028
Xylenes, Total	ND	0.10		mg/Kg	1	5/10/2018 7:34:28 PM	38028
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	5/10/2018 7:34:28 PM	38028
Surr: Toluene-d8	93.2	70-130		%Rec	1	5/10/2018 7:34:28 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805508**

Date Reported: **5/21/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** L6-1'

**Project:** Candelario EMR

**Collection Date:** 5/3/2018 9:45:00 AM

**Lab ID:** 1805508-007

**Matrix:** SOIL

**Received Date:** 5/9/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1600	75		mg/Kg	50	5/16/2018 12:04:55 PM	38135
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>AG</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/10/2018 7:57:34 PM	38028
Surr: BFB	114	70-130		%Rec	1	5/10/2018 7:57:34 PM	38028
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/13/2018 5:54:45 AM	38069
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/13/2018 5:54:45 AM	38069
Surr: DNOP	97.5	70-130		%Rec	1	5/13/2018 5:54:45 AM	38069
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>AG</b>
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	5/10/2018 7:57:34 PM	38028
Benzene	ND	0.024		mg/Kg	1	5/10/2018 7:57:34 PM	38028
Toluene	ND	0.049		mg/Kg	1	5/10/2018 7:57:34 PM	38028
Ethylbenzene	ND	0.049		mg/Kg	1	5/10/2018 7:57:34 PM	38028
Xylenes, Total	ND	0.097		mg/Kg	1	5/10/2018 7:57:34 PM	38028
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	5/10/2018 7:57:34 PM	38028
Surr: Toluene-d8	86.4	70-130		%Rec	1	5/10/2018 7:57:34 PM	38028

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805508

21-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38134		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 38134		RunNo: 51301					
Prep Date:	5/15/2018		Analysis Date: 5/15/2018		SeqNo: 1667748		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-38134		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 38134		RunNo: 51301					
Prep Date:	5/15/2018		Analysis Date: 5/15/2018		SeqNo: 1667749		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Sample ID	MB-38135		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	38135		RunNo:	51301				
Prep Date:	5/15/2018		Analysis Date:	5/15/2018		SeqNo:	1667780		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-38135		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 38135		RunNo: 51301					
Prep Date:	5/15/2018		Analysis Date: 5/15/2018		SeqNo: 1667781		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805508

21-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38069		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 38069		RunNo: 51227					
Prep Date:	5/11/2018		Analysis Date: 5/13/2018		SeqNo: 1665208		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	7.5		10.00		75.2	70	130			

Sample ID	LCS-38069		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 38069		RunNo: 51235					
Prep Date:	5/11/2018		Analysis Date: 5/15/2018		SeqNo: 1666995		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	89.4	70	130			
Surr: DNOP	5.2		5.000		104	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 Quantitative 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#: 1805508

21-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	<b>lcs-38028</b>		SampType: <b>LCS4</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>					
Client ID:	<b>BatchQC</b>		Batch ID: <b>38028</b>		RunNo: <b>51185</b>					
Prep Date:	<b>5/9/2018</b>		Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663139</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	1.000	0	81.3	80	120			
Toluene	0.92	0.050	1.000	0	92.3	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Toluene-d8	0.47		0.5000		93.9	70	130			

Sample ID	<b>mb-38028</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>					
Client ID:	<b>PBS</b>		Batch ID: <b>38028</b>		RunNo: <b>51185</b>					
Prep Date:	<b>5/9/2018</b>		Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663140</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.050								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.64		0.5000		128	70	130			
Surr: Toluene-d8	0.45		0.5000		90.0	70	130			

### Qualifiers:

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D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805508

21-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	<b>lcs-38028</b>		SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>					
Client ID:	<b>LCSS</b>		Batch ID: <b>38028</b>		RunNo: <b>51185</b>					
Prep Date:	<b>5/9/2018</b>		Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663109</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.7	70	130			
Surr: BFB	510		500.0		103	70	130			

Sample ID	<b>mb-38028</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>					
Client ID:	<b>PBS</b>		Batch ID: <b>38028</b>		RunNo: <b>51185</b>					
Prep Date:	<b>5/9/2018</b>		Analysis Date: <b>5/10/2018</b>		SeqNo: <b>1663110</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	590		500.0		118	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
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P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



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-CARLSBAD

Work Order Number: 1805508

RcptNo: 1

Received By: Isaiah Ortiz

5/9/2018 9:30:00 AM

IO

Completed By: Ashley Gallegos

5/9/2018 12:41:03 PM

AG

Reviewed By:

05/09/18

Labeled by:

JB 05/09/18

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Client

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐  
5. Sample(s) in proper container(s)? Yes ☒ No ☐  
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐  
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒  
10. Were any sample containers received broken? Yes ☐ No ☒  
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐  
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
13. Is it clear what analyses were requested? Yes ☒ No ☐  
14. 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)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

<b>Chain-of-Custody Record</b>		Turn-Around Time:
Client: <i>SMA - Cambria</i>	<input type="checkbox"/> Standard	<input checked="" type="checkbox"/> Rush
	<i>5 day</i>	
	Project Name:	<i>Camdeno Park</i>
Mailing Address:		

Client: SMA - Carlsbad

**Mailing Address:**

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

### Accreditation

## Accreditation

☐ NELAP      ☐ Other

☐ EDD (Type)

Date	Time	Matrix	Sample Request ID
------	------	--------	-------------------

## Matrix

Sample Request ID

~~1463125~~

3/18/00	20K	18-0.51
---------	-----	---------

11:00	61-0.5'
-------	---------

9:56	67-0.5
------	--------

11:20	1	64-11A
-------	---	--------

		10:37	62-157
--	--	-------	--------

	10:30	L9 West - 0.
--	-------	--------------

✓	9:45	↓	66-11
---	------	---	-------

Date: \_\_\_\_\_ Time: \_\_\_\_\_

8/8

Date: 11/11/11 Time: 11:11

8/8 1961

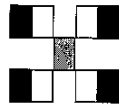
Relinquished by:

3

Relinquished by:



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

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

Remarks:

21

Rock am.  
rock samples in indiv. sand with  
box.

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  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 23, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario EMR

OrderNo.: 1805661

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 10 sample(s) on 5/11/2018 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](http://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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805661**

Date Reported: **5/23/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S1-0.5'

**Project:** Candelario EMR

**Collection Date:** 5/7/2018 1:30:00 PM

**Lab ID:** 1805661-001

**Matrix:** SOIL

**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	19000	1500		mg/Kg	1E	5/18/2018 2:45:58 PM	38174
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/17/2018 9:41:11 PM	38103
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/17/2018 9:41:11 PM	38103
Surr: DNOP	108	70-130		%Rec	1	5/17/2018 9:41:11 PM	38103
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/14/2018 7:20:13 PM	38079
Surr: BFB	81.9	15-316		%Rec	1	5/14/2018 7:20:13 PM	38079
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	5/14/2018 7:20:13 PM	38079
Benzene	ND	0.024		mg/Kg	1	5/14/2018 7:20:13 PM	38079
Toluene	ND	0.047		mg/Kg	1	5/14/2018 7:20:13 PM	38079
Ethylbenzene	ND	0.047		mg/Kg	1	5/14/2018 7:20:13 PM	38079
Xylenes, Total	ND	0.094		mg/Kg	1	5/14/2018 7:20:13 PM	38079
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	5/14/2018 7:20:13 PM	38079

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805661**

Date Reported: **5/23/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S1-1'

**Project:** Candelario EMR

**Collection Date:** 5/7/2018 1:38:00 PM

**Lab ID:** 1805661-002

**Matrix:** SOIL

**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	24000	1500		mg/Kg	1E	5/18/2018 2:58:22 PM	38174

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805661**

Date Reported: **5/23/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S1-2'

**Project:** Candelario EMR

**Collection Date:** 5/7/2018 1:40:00 PM

**Lab ID:** 1805661-003

**Matrix:** SOIL

**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	7600	300		mg/Kg	200	5/18/2018 1:56:21 PM	38197

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805661**

Date Reported: **5/23/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S2-0.5'

**Project:** Candelario EMR

**Collection Date:** 5/7/2018 1:42:00 PM

**Lab ID:** 1805661-004

**Matrix:** SOIL

**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	3800	150		mg/Kg	100	5/18/2018 3:10:47 PM	38174
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/17/2018 10:03:25 PM	38103
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/17/2018 10:03:25 PM	38103
Surr: DNOP	99.6	70-130		%Rec	1	5/17/2018 10:03:25 PM	38103
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/14/2018 7:43:32 PM	38079
Surr: BFB	85.1	15-316		%Rec	1	5/14/2018 7:43:32 PM	38079
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	5/14/2018 7:43:32 PM	38079
Benzene	ND	0.025		mg/Kg	1	5/14/2018 7:43:32 PM	38079
Toluene	ND	0.050		mg/Kg	1	5/14/2018 7:43:32 PM	38079
Ethylbenzene	ND	0.050		mg/Kg	1	5/14/2018 7:43:32 PM	38079
Xylenes, Total	ND	0.099		mg/Kg	1	5/14/2018 7:43:32 PM	38079
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/14/2018 7:43:32 PM	38079

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805661**

Date Reported: **5/23/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S2-1'

**Project:** Candelario EMR

**Collection Date:** 5/7/2018 1:46:00 PM

**Lab ID:** 1805661-005

**Matrix:** SOIL

**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	230	30		mg/Kg	20	5/17/2018 5:35:11 PM	38174

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805661**

Date Reported: **5/23/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S2-2'

**Project:** Candelario EMR

**Collection Date:** 5/7/2018 1:48:00 PM

**Lab ID:** 1805661-006

**Matrix:** SOIL

**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1100		30	mg/Kg	20	5/17/2018 5:47:36 PM	38174

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805661**Date Reported: **5/23/2018****CLIENT:** Souder, Miller & Associates**Client Sample ID:** S3-0.5'**Project:** Candelario EMR**Collection Date:** 5/7/2018 1:50:00 PM**Lab ID:** 1805661-007**Matrix:** SOIL**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	9900	750		mg/Kg	500	5/18/2018 2:33:34 PM	38197
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	22	9.9		mg/Kg	1	5/17/2018 10:25:35 PM	38103
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/17/2018 10:25:35 PM	38103
Surr: DNOP	102	70-130		%Rec	1	5/17/2018 10:25:35 PM	38103
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/14/2018 8:07:02 PM	38079
Surr: BFB	82.6	15-316		%Rec	1	5/14/2018 8:07:02 PM	38079
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	5/14/2018 8:07:02 PM	38079
Benzene	ND	0.025		mg/Kg	1	5/14/2018 8:07:02 PM	38079
Toluene	ND	0.049		mg/Kg	1	5/14/2018 8:07:02 PM	38079
Ethylbenzene	ND	0.049		mg/Kg	1	5/14/2018 8:07:02 PM	38079
Xylenes, Total	ND	0.098		mg/Kg	1	5/14/2018 8:07:02 PM	38079
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	5/14/2018 8:07:02 PM	38079

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805661**

Date Reported: **5/23/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S3-1'

**Project:** Candelario EMR

**Collection Date:** 5/7/2018 1:53:00 PM

**Lab ID:** 1805661-008

**Matrix:** SOIL

**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	260		30	mg/Kg	20	5/18/2018 12:54:19 PM	38197

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805661**

Date Reported: **5/23/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S3-2'

**Project:** Candelario EMR

**Collection Date:** 5/7/2018 2:00:00 PM

**Lab ID:** 1805661-009

**Matrix:** SOIL

**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	35	30		mg/Kg	20	5/18/2018 1:06:43 PM	38197

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1805661**

Date Reported: **5/23/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** BG6

**Project:** Candelario EMR

**Collection Date:** 5/7/2018 2:15:00 PM

**Lab ID:** 1805661-010

**Matrix:** SOIL

**Received Date:** 5/11/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	5/18/2018 1:19:07 PM	38197

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805661

23-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38174		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	38174		RunNo:	51341				
Prep Date:	5/17/2018		Analysis Date:	5/17/2018		SeqNo:	1671534		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-38174		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 38174		RunNo: 51341					
Prep Date:	5/17/2018		Analysis Date: 5/17/2018		SeqNo: 1671535		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Sample ID	MB-38197		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	38197		RunNo:	51380				
Prep Date:	5/18/2018		Analysis Date:	5/18/2018		SeqNo:	1672244		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-38197		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 38197		RunNo: 51380					
Prep Date:	5/18/2018		Analysis Date: 5/18/2018		SeqNo: 1672245		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805661

23-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38103		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 38103		RunNo: 51327					
Prep Date:	5/14/2018		Analysis Date: 5/17/2018		SeqNo: 1669940		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	9.3		10.00		92.8	70	130			

Sample ID	LCS-38103		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 38103		RunNo: 51327					
Prep Date:	5/14/2018		Analysis Date: 5/17/2018		SeqNo: 1669941		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.4	70	130			
Surr: DNOP	4.6		5.000		92.2	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805661

23-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38079		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 38079		RunNo: 51246					
Prep Date:	5/11/2018		Analysis Date: 5/14/2018		SeqNo: 1666086		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	930		1000		93.4	15	316			

Sample ID	LCS-38079		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 38079		RunNo: 51246					
Prep Date:	5/11/2018		Analysis Date: 5/14/2018		SeqNo: 1666087		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	104	75.9	131			
Surr: BFB	1000		1000		105	15	316			

Sample ID	1805661-004AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	S2-0.5'		Batch ID: 38079		RunNo: 51246					
Prep Date:	5/11/2018		Analysis Date: 5/14/2018		SeqNo: 1666093		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	24.13	0	101	77.8	128			
Surr: BFB	1000		965.3		105	15	316			

Sample ID	1805661-004AMSD		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	S2-0.5'		Batch ID: 38079		RunNo: 51246					
Prep Date:	5/11/2018		Analysis Date: 5/14/2018		SeqNo: 1666094		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.22	0	93.6	77.8	128	7.49	20	
Surr: BFB	940		969.0		97.4	15	316	0	0	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1805661

23-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID	MB-38079		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 38079		RunNo: 51246					
Prep Date:	5/11/2018		Analysis Date: 5/14/2018		SeqNo: 1666130		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	LCS-38079		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 38079		RunNo: 51246					
Prep Date:	5/11/2018		Analysis Date: 5/14/2018		SeqNo: 1666140		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.90	0.10	1.000	0	90.2	70.1	121			
Benzene	0.94	0.025	1.000	0	94.3	77.3	128			
Toluene	0.97	0.050	1.000	0	97.3	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	95.7	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	98.3	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	1805661-001AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	S1-0.5'		Batch ID: 38079		RunNo: 51246					
Prep Date:	5/11/2018		Analysis Date: 5/14/2018		SeqNo: 1666143		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.91	0.095	0.9479	0	96.3	56.9	130			
Benzene	0.94	0.024	0.9479	0.01143	98.1	68.5	133			
Toluene	1.0	0.047	0.9479	0.01454	104	75	130			
Ethylbenzene	0.99	0.047	0.9479	0	104	79.4	128			
Xylenes, Total	3.0	0.095	2.844	0	107	77.3	131			
Surr: 4-Bromofluorobenzene	1.0		0.9479		106	80	120			

Sample ID	1805661-001AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	S1-0.5'		Batch ID: 38079		RunNo: 51246					
Prep Date:	5/11/2018		Analysis Date: 5/14/2018		SeqNo: 1666144		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.90	0.098	0.9775	0	92.0	56.9	130	1.50	20	
Benzene	0.93	0.024	0.9775	0.01143	94.4	68.5	133	0.780	20	
Toluene	0.98	0.049	0.9775	0.01454	98.4	75	130	1.98	20	
Ethylbenzene	0.98	0.049	0.9775	0	99.9	79.4	128	1.25	20	

### 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 Quantitative 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#: 1805661

23-May-18

Client: Souder, Miller &amp; Associates

Project: Candelario EMR

Sample ID 1805661-001AMSD		SampType: MSD			TestCode: EPA Method 8021B: Volatiles					
Client ID: S1-0.5'	Batch ID: 38079			RunNo: 51246						
Prep Date: 5/11/2018	Analysis Date: 5/14/2018			SeqNo: 1666144		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.0	0.098	2.933	0	102	77.3	131	1.35	20	
Surr: 4-Bromofluorobenzene	1.0		0.9775		105	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 Quantitative 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  
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-CARLSBAD

Work Order Number: 1805661

RcptNo: 1

Received By: Isaiah Ortiz

5/11/2018 9:50:00 AM

Completed By: Ashley Gallegos

5/11/2018 11:59:01 AM

Reviewed By: of 5/11

Labeled by: IC

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

### Log In

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

# of preserved  
bottles checked  
for pH: \_\_\_\_\_  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.3	Good	Yes			

# Chain-of-Custody Record

Client: SMA Carlisbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush

Project Name: Candelario ENR

Project #:

Project Manager:

Austin Weyant

Sampler:

NRS

On Ice: ☒ Yes ☐ No

Sample Temperature: 0.5

Date Time Matrix Sample Request ID

5/7/18	1:30	soil	S1 - 0.5'
	1:38		S1 - 1'
	1:40	(eqcc)	S1 - 2'
	1:42		S2 - 0.5'
	1:46		S2 - 1'
	1:48		S2 - 2'
	1:50		S3 - 0.5'
	1:53		S3 - 1'
	2:00		S3 - 2'
	2:15		Bglc

Container Type and #

402.

Preservative Type

(BAG)

HEAL No.

1805661

## Analysis Request

BTEX + MTBE + TMB's (8021) ☒ 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<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>) ☒ 8081 Pesticides / 8082 PCB's ☒ 8260B (VOA) ☒ 8270 (Semi-VOA) ☒ Air Bubbles (Y or N) ☒

Remarks:

Rockcliff

Received by:

[Signature]

Date Time

5/10/18 0900

Received by:

[Signature]

Date Time

5/11/18 950





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

June 08, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario RMR

OrderNo.: 1805G07

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/31/2018 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](http://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 #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1805G07**

Date Reported: **6/8/2018**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** BG4

**Project:** Candelario RMR

**Collection Date:** 5/3/2018 2:30:00 PM

**Lab ID:** 1805G07-001

**Matrix:** SOIL

**Received Date:** 5/31/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	250	30	H	mg/Kg	20	6/5/2018 6:33:07 PM	38484

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 1805G07

08-Jun-18

Client: Souder, Miller &amp; Associates

Project: Candelario RMR

Sample ID	MB-38484		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	38484		RunNo:	51782				
Prep Date:	6/5/2018		Analysis Date:	6/5/2018		SeqNo:	1690475		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-38484		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 38484		RunNo: 51782					
Prep Date:	6/5/2018		Analysis Date: 6/5/2018		SeqNo: 1690476		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



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-CARLSBAD

Work Order Number: 1805G07

RcptNo: 1

Received By: Jazzmine Burkhead 5/31/2018 9:50:00 AM

Completed By: Erin Melendrez 5/31/2018 11:52:44 AM

Reviewed By: *LB*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐  
5. Sample(s) in proper container(s)? Yes ☒ No ☐  
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐  
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒  
10. Were any sample containers received broken? Yes ☐ No ☒  
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐  
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
13. Is it clear what analyses were requested? Yes ☒ No ☐  
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐  
# of preserved bottles checked for pH: 5/31  
( $<2$  or  $>12$  unless noted)  
Adjusted? IO  
Checked by: IO

### Special Handling (if applicable)

15. 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: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.4	Good	Yes			





September 29, 2016

#5B26934-BG8

NMOCD District II  
Mike Bratcher  
811 S. First St.  
Artesia, NM 88210

**SUBJECT: UPDATE ON THE EMERGENCY RESPONSE ASSOCIATED WITH THE SCB 5B TO CANDELARIO 4" POLYLINE, EDDY COUNTY, NEW MEXICO**

Dear Mr. Bratcher:

On behalf of Rockcliff Operating New Mexico LLC (Rockcliff), Souder, Miller & Associates (SMA) prepared this update to the Remediation Report that describes the remediation activities that have taken place since the submission of the report to all involved parties on 7/4/2018. Figure 1 illustrates the updated site and sample location map.

Table 1 summarizes information regarding the release.

<b>Table 1: Release Information and Closure Criteria</b>			
Name	SCB 5B to Candelario 4" Polyline	Company	Rockcliff Operating New Mexico LLC
API Number	N/A	Location	32.294911, -104.043545
Incident Number	nAB1813056113		
Estimated Date of Release	April 26, 2018 – April 29, 2018	Date Reported to NMOCD	April 30, 2018
Land Owner	Mosaic Potash	Reported To	NMOCD II
Source of Release	Produced Water Transfer Line		
Released Volume	Produced Water & Crude Oil	Released Material	Approx. 720 bbls PW & Approx. 7.2 bbls Crude Oil
Recovered Volume	Approx. 385 bbls	Net Release	Approx. 342.2 bbls
NMOCD Closure Criteria	<50 feet to groundwater		
SMA Response Dates	Initial: April 30 – May 4, May 7, May 15, 2018, <b>July 12 &amp; 20 2018, August 23 &amp; 24, 2018</b>		

## **1.0 Background**

On April 26, 2018, a third party, ran over the 4" polyline that transfers produced water from the SCB #5B CTB to the Candelario SWD #1 disposal well, which caused a failure in the line. Emergency Response Initial action was conducted by SMA and the operator, and included source elimination and site security as well as site stabilization activities.

## **2.0 Site Information and Closure Criteria**

Based on the information presented herein and the previously submitted Remediation Report, the applicable NMOCD Closure Criteria for this site remains for groundwater depth of less than 50 feet bgs.

The area associated with the SCB 5B to Candelario 4" Polylines is located approximately 1.5 miles from Loving, New Mexico on private land, adjacent to the Pecos River. SMA searched the New Mexico State Engineers' Office's (NMOSE) database for water wells in the area and found 2 wells within 1000 feet, both with a depth to groundwater at 31 feet, and 102 wells within 3 miles of the site with an average depth to ground water at 40 feet.

## **3.0 Summary of Work Activities and Findings**

### **3.1 Source Excavation**

As mentioned in the approved Remediation Report, the source of the release, where the poly-pipe was struck by equipment is represented by sample locations S1-S4. After the river was secured during initial action, a delineation was completed for these sample locations to 2 feet bgs (Table 2).

On July 12, 2018, SMA arrived on site to guide the further delineation and excavation of the area surrounding the source. Six composite sidewall samples were collected, obtaining lateral delineation and ensuring the removal of impacted material. Sample location S1 (the source) was vertically extended to refusal at conglomerate rock, which occurred at 3 feet bgs.

As the release area surrounding the source overlapped a county road, SMA worked with BLM and the County to ensure the road remained closed until the remediation had been completed. As per the stipulations of approval, an email notification was sent to NMOCD and BLM announcing that confirmation samples were being collected from the open excavation. BLM Agent visually inspected the open excavation. After verbal approval from the BLM and review of our laboratory analysis, the excavation was backfilled with clean material to restore the road and surrounding area to its previous contours. The impacted material was hauled off to disposal at Lea Land LLC, an NMOCOD approved facility. All waste manifests concerning this additional work, as well as work done during the initial action can be found in Appendix C.

A total of 8 soil samples were collected for laboratory analysis for total chloride using EPA Method 300.0. Table 2 itemizes the samples alongside the samples that were previously collected in the vicinity. Locations for all samples are depicted on Figure 1. Laboratory samples were collected in accordance with the submitted Remediation Plan. Samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico (Appendix A).

### **3.2 Hydro-Excavation**

As stated in the approved Remediation Report, the release ran from the polyline across Fisherman's Lane and split into two individual paths. One path flowed over the edge of the ravine to the northeast,



briefly diverging and then merging before entering the river. This first path is represented by the collection of sample sites L1-L9. The sample points collected on this northeast path are of the removed and disposed of soil and not of the conglomerated rock material that remains today. It was proposed that a hydro excavation be performed to wash the remaining bedrock in the northeast flow path, as well as the portions of surface bedrock that scattered the low river crossing.

On August 23, 2018, SMA arrived on site to complete the hydro excavation as per the approved work plan. SMA personnel and their contractors placed 50 feet of absorbent booms around each work area ("cell") as well as re-established berms with clean soil which prevented any runoff into the river. As the cells were being hydro excavated, a vacuum truck was placed at the lowest lying area of each boomed cell collecting the fluid. On August 24, 2018, SMA personnel returned to complete the hydro excavation process. All collected fluid was disposed of in a Class 2 Injection Well in accordance with NMOCD guidance for RCRA exempt material. SMA also used fresh water, in conjunction with NMOCD regulation (as defined by NMAC 20.6.2.3103 and NMOCD Fresh Water Stations Memo 8/08) and collected water quality field screens from the source using an electrical conductivity (EC) meter that can be seen in Table 3.

There was a total of five (5) cells (Cells 1-5) established as plausible candidates for the hydro excavation. Two of these cells were based on previous excavation attempts that ended in refusal surrounding sample locations L4 – L5 (Cell 1) and L12 & L14 (Cell 4). The remaining cells (Cells 2, 3 and 5) were also established due to the natural presence of conglomerate bed rock on the surface of the release area.

After all fluid was collected in each cell, a composite bedrock sample was taken from within the work area. A total of 5 bedrock samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D. Table 3 itemizes the samples alongside the samples that were previously collected in the vicinity. Locations for all samples are depicted on Figure 2. Laboratory samples were collected in accordance with the submitted Remediation Plan. Samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico (Appendix A).

## **4.0 Conclusions**

Due to the varying geology in the area, the sample analysis has been compared to its associated background sample that was established per each of the NRCS soil types (Soil Map attached as Figure 1) represented in the release area as well as samples that were collected surrounding the cells (Cell 1 & Cell 4). The majority of the field samples collected on August 23 and August 24, 2018 after hydro excavation show a decrease in chloride concentration since the initial action (seen in Table 2).

Cells 2, 3 and 5 show concentrations in the 2000 mg/kg range which is only slightly elevated from a background in the area (BG2) and the natural chloride concentration of the Pecos River. The chloride concentration of Cell 1 is 4500 mg/kg post-hydrovac, 42% to 62% lower than the refusal samples collected in sample locations L4 and L5. Lab analysis shows a chloride concentration of 9600 mg/kg for Cell 4. This specific soil type, Sandy Arno-Harkey Complex, shows a background of 9800 mg/kg (BG1). According to the NRCS Web soil survey, this soil type is a moderate to strongly saline soil with EC's ranging from 8.0 to 32.0 mmhos/cm. This consistent chloride concentration, pre and post hydro excavation (decreasing only 2%), suggests the chloride present in this soil type is not as soluble as the surrounding soil types. This data is also confirmed by the properties and qualities described in the



attached NRCS Soil Report illustrating this soil type with a very high potential runoff class and inability to affectively absorb/leach water.

## **5.0 Scope and Limitations**

The scope of our services included: assessment sampling; verifying release stabilization, regulatory liaison, and preparing this update to the remediation plan. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-8801 or Shawna Chubbuck at 505-325-7535.

Submitted by:  
SOUDER, MILLER & ASSOCIATES

Reviewed by:

A handwritten signature in black ink that reads "M. Sanjari". The signature is written in a cursive, flowing style.

Melodie Sanjari  
Staff Scientist

A handwritten signature in blue ink that reads "Shawna Chubbuck". The signature is written in a cursive, flowing style.

Shawna Chubbuck  
Senior Scientist

**ATTACHMENTS:**

**Figures:**

Figure 1: Updated Site and Sample Location Map of Source Excavation

Figure 2: Updated Site and Sample Location Map of Hydro-Excavation

**Tables:**

Table 2: Updated Summary of Sample Results

**Appendices:**

Appendix A: NRCS Soil Report (Map & Soil Data)

Appendix B: Laboratory Analytical Reports

Appendix C: Waste Manifests

# FIGURES





Hydro Excavation Sampling Cells  
Candelario Emergency Response - Rockcliff Energy  
Eddy County, New Mexico

Figure 2

Date Saved:  
9/19/2018

By: _____	Date: _____	Revisions	Descr: _____
By: _____	Date: _____		Descr: _____

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Drawn	<b>Melodie Sanjari</b>
Checked	_____
Approved	_____



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Serving the Southwest & Rocky Mountains

## TABLE 2

**Candelario Emergency Response Sample Summary Table**

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Completed Action	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- Screens (ppm)	Cl- Labs mg/Kg	Soil Type
NMOCD RRAL's for Site Ranking of 20				50 mg/Kg	10 mg/Kg				100 mg/Kg			
L1	5/3/2018	0.5	excavated	<0.217	<0.024	<4.8	<9.4	<47	<61.2	12170	850	
L2	5/3/2018	1.5	excavated	<0.216	<0.024	<4.8	<9.6	<48	<62.4	8014	320	
L3	4/30/2018	1	excavated	<0.221	<0.025	<4.9	41	<47	41	7003	6500	
L4	5/3/2018	1	excavated	<0.224	<0.025	<5.0	<9.4	<47	<61.4	>28700	19000	
L5	4/30/2018	1	excavated	<0.210	<0.023	5.9	69	<49	74.9	>28700	72000	
L6	5/3/2018	1	excavated	<0.219	<0.024	<4.9	<9.1	<45	<59	--	1600	
L7	5/3/2018	0.5	excavated	<0.213	<0.024	<4.7	15	<48	15	--	4200	
L8	5/3/2018	0.5	excavated	<0.219	<0.024	<4.9	<10	<50	<64.9	--	160	
L9	4/30/2018	0.5	excavated	<0.221	0.025	<4.9	<9.5	<47	<61.4	--	5400	
L9 West	5/3/2018	0.5	excavated	<0.225	<0.025	<5.0	<9.0	<45	<59	--	8000	
L10	5/1/2018	1	excavated	--	--	--	--	--	--	--	--	
	5/1/2018	2	excavated	<0.207	<0.023	<4.6	<9.6	<48	<62.2	--	16000	
	5/1/2018	3	excavated	<0.179	<0.020	<4.0	<9.8	<49	<62.8	--	4900	
L11	5/1/2018	1	excavated	<0.215	0.024	12	130	<47	132	--	27000	
	5/1/2018	1.5	excavated	--	--	--	--	--	--	--	--	
	5/1/2018	2	excavated	<0.143	<0.016	<3.2	23	<47	23	--	3800	
L12	5/1/2018	0.5	excavated	--	--	--	--	--	--	--	--	
	5/1/2018	1	excavated	<0.21	<0.023	<4.7	<9.6	<48	<62.3	--	16000	
	5/1/2018	2	excavated	<0.145	<0.016	<3.2	<9.0	<45	<57.2	15000	8800	
L13	5/1/2018	0.5	excavated	--	--	--	--	--	--	--	--	
	5/3/2018	1	excavated	<0.22	<0.024	<4.9	240	1000	1240	--	2000	
	5/1/2018	2	excavated	<0.180	<0.020	<4.0	<9.3	<47	<60.3	4420	5800	
L14	5/3/2018	2.5	excavated	--	--	--	--	--	--	4030	--	
Cell 1	8/23/2018	surface rock	hydro-excav.	<0.217	<0.024	<4.8	<9.7	<48	<62.5	--	4500	
Cell 2	8/24/2018	surface rock	hydro-excav.	<0.217	<0.024	<4.8	<9.8	<49	<63.6	--	2000	
Cell 3	8/24/2018	surface rock	hydro-excav.	<0.212	<0.024	<4.7	<10	<50	<64.7	--	2200	
Cell 4	8/24/2018	surface rock	hydro-excav.	<0.224	<0.025	<5.0	<10	<51	<66.0	--	9600	
Cell 5	8/24/2018	surface rock	hydro-excav.	<0.225	<0.025	<5.0	<9.8	<49	<63.8	--	2300	
BG1	4/30/2018	background	--	--	--	--	--	--	--	--	9800	Arno-Harkey Complex (sandy)
BG2	5/3/2018	background	--	--	--	--	--	--	--	--	1100	Arno-Harkey Complex
Hydrovac. Water Source	8/23/2018	--	--	--	--	--	--	--	--	1300	--	
	8/24/2018	--	--	--	--	--	--	--	--	1220	--	
S1 (Source)	5/7/2018	0.5	excavated	<0.212	<0.024	<4.7	<9.9	<49	<63.6	--	19000	
		1	excavated	--	--	--	--	--	--	--	24000	
		2	excavated	--	--	--	--	--	--	--	7600	
	7/20/2018	2.5	excavated	--	--	--	--	--	--	--	3000	
		3	excavated	--	--	--	--	--	--	--	1300	
S2	5/7/2018	0.5	excavated	<0.224	<0.025	<5.0	<10	<50	<65.0	--	3800	
		1	excavated	--	--	--	--	--	--	--	230	
		2	excavated	--	--	--	--	--	--	--	1100	
S3	5/7/2018	0.5	excavated	<0.221	<0.025	<4.9	22	<49	22	--	9900	
		1	excavated	--	--	--	--	--	--	--	260	
		2	excavated	--	--	--	--	--	--	--	35	
S4	5/3/2018	2.5	excavated	<0.217	<0.024	<4.8	<9.4	<47	<61.2	--	2200	
SW1	7/12/2018	sidewall	in-situ	--	--	--	--	--	--	--	39	
SW2	7/12/2018	sidewall	in-situ	--	--	--	--	--	--	--	150	
SW3	7/12/2018	sidewall	in-situ	--	--	--	--	--	--	--	32	
SW4	7/12/2018	sidewall	in-situ	--	--	--	--	--	--	--	<30	
SW5	7/12/2018	sidewall	in-situ	--	--	--	--	--	--	--	120	
SW6	7/12/2018	sidewall	in-situ	--	--	--	--	--	--	--	<30	Harkey Very Fine
BG6	5/7/2018	background	--	--	--	--	--	--	--	--	<30	Sandy Loam

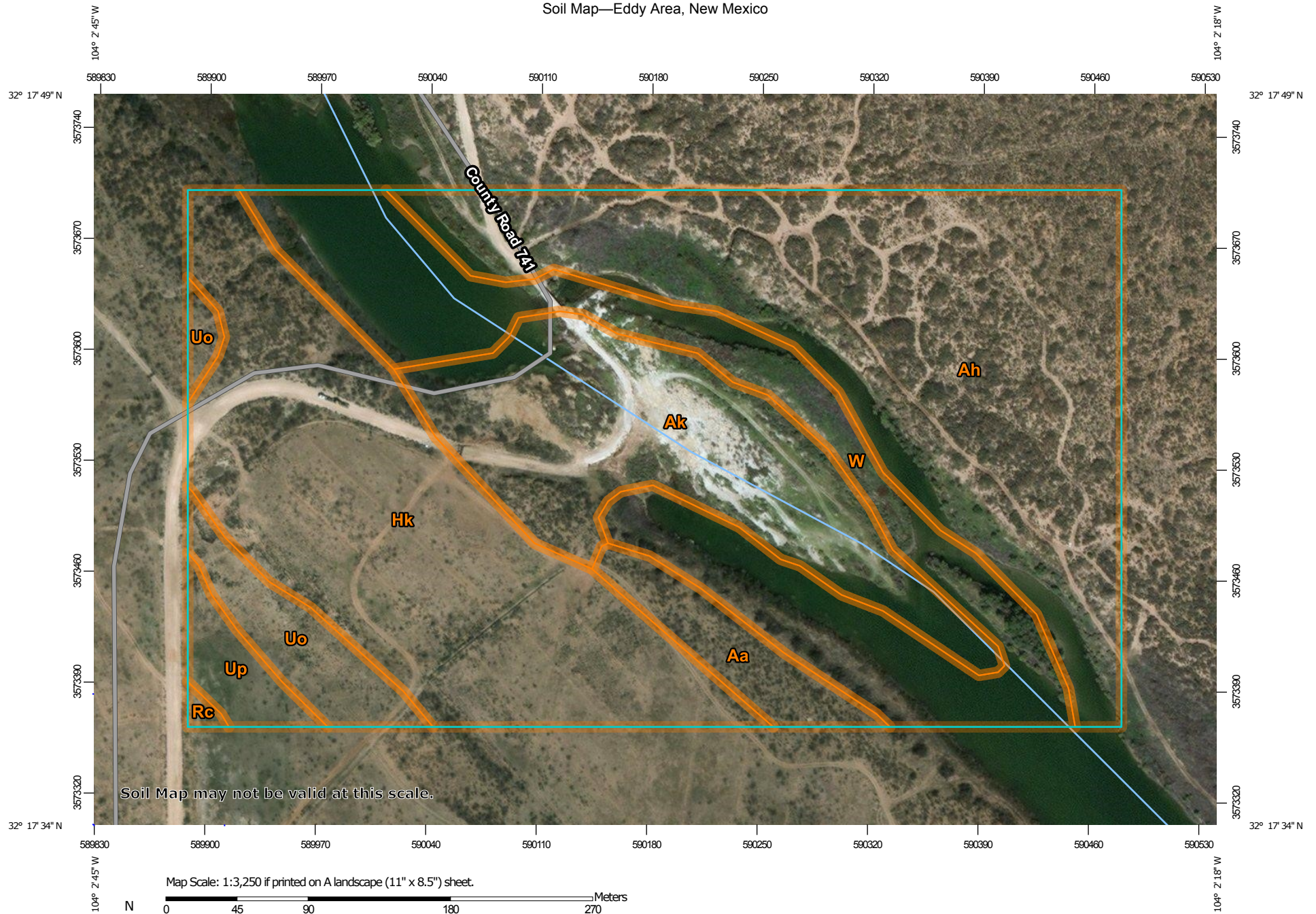
-- not analyzed  
excavated

# APPENDICES



# NRCS Soil Map & Data

# Soil Map—Eddy Area, New Mexico





## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 13, Sep 9, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 21, 2013—Mar 16, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Aa	Anthony sandy loam, 0 to 1 percent slopes	1.7	3.3%
Ah	Anthony sandy loam, 0 to 1 percent slopes	15.3	30.8%
Ak	Arno-Harkey complex, saline, 0 to 1 percent slopes	7.8	15.6%
Hk	Harkey very fine sandy loam, 0 to 1 percent slopes	12.4	25.0%
Rc	Reagan loam, 0 to 1 percent slopes	0.1	0.2%
Uo	Upton gravelly loam, 0 to 9 percent slopes	2.0	4.1%
Up	Upton soils, 0 to 1 percent slopes	1.0	2.0%
W	Water	9.4	19.0%
<b>Totals for Area of Interest</b>		<b>49.7</b>	<b>100.0%</b>

## Eddy Area, New Mexico

### Ak—Arno-Harkey complex, saline, 0 to 1 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1w3y

*Elevation:* 3,000 to 4,200 feet

*Mean annual precipitation:* 10 to 16 inches

*Mean annual air temperature:* 60 to 64 degrees F

*Frost-free period:* 180 to 220 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Arno and similar soils:* 50 percent

*Harkey and similar soils:* 25 percent

*Minor components:* 2 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Arno

##### Setting

*Landform:* Alluvial fans, flood plains

*Landform position (three-dimensional):* Rise, tal

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium

##### Typical profile

*H1 - 0 to 9 inches:* silty clay loam

*H2 - 9 to 60 inches:* silty clay

##### Properties and qualities

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* Occasional

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Gypsum, maximum in profile:* 5 percent

*Salinity, maximum in profile:* Moderately saline to strongly saline (8.0 to 32.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 1.0

*Available water storage in profile:* Low (about 5.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 6s

*Land capability classification (nonirrigated):* 7s



*Hydrologic Soil Group:* D  
*Ecological site:* Salty Bottomland (R042XC033NM)  
*Hydric soil rating:* No

## **Description of Harkey**

### **Setting**

*Landform:* Alluvial fans, flood plains  
*Landform position (three-dimensional):* Rise, talf  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from sedimentary rock

### **Typical profile**

*H1 - 0 to 9 inches:* very fine sandy loam  
*H2 - 9 to 60 inches:* very fine sandy loam

### **Properties and qualities**

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.60 to 2.00 in/hr)  
*Depth to water table:* About 48 to 72 inches  
*Frequency of flooding:* Occasional  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 30 percent  
*Gypsum, maximum in profile:* 2 percent  
*Salinity, maximum in profile:* Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 13.0  
*Available water storage in profile:* Low (about 6.0 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* 2s  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* B  
*Ecological site:* Salt Flats (R042XC036NM)  
*Hydric soil rating:* No

## **Minor Components**

### **Anthony**

*Percent of map unit:* 1 percent  
*Landform:* Alluvial fans, flood plains  
*Landform position (three-dimensional):* Rise, talf  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear  
*Ecological site:* Sandy (R042XC004NM)  
*Hydric soil rating:* Yes

### **Pima variant**

*Percent of map unit:* 1 percent

*Landform:* Alluvial fans, alluvial flats, flood plains  
*Landform position (three-dimensional):* Rise, tal  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, convex  
*Ecological site:* Bottomland (R042XC017NM)  
*Hydric soil rating:* Yes

## Data Source Information

Soil Survey Area: Eddy Area, New Mexico  
Survey Area Data: Version 13, Sep 9, 2017

# LABORATORY ANALYTICAL REPORTS





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

August 06, 2018

Austin Weyant  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-7040  
FAX

RE: Candelario

OrderNo.: 1807C41

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 9 sample(s) on 7/24/2018 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](http://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 #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1807C41

Date Reported: 8/6/2018

**CLIENT:** Souder, Miller & Associates

**Lab Order:** 1807C41

**Project:** Candelario

**Lab ID:** 1807C41-001

**Collection Date:** 7/20/2018 10:30:00 AM

**Client Sample ID:** S1-2.5'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	3000	150		mg/Kg	100	7/30/2018 9:16:48 PM	39452

**Lab ID:** 1807C41-002

**Collection Date:** 7/20/2018 11:00:00 AM

**Client Sample ID:** S1-3'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	1300	75		mg/Kg	50	7/30/2018 9:29:13 PM	39452

**Lab ID:** 1807C41-004

**Collection Date:** 7/12/2018 9:00:00 AM

**Client Sample ID:** SW1

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	39	30		mg/Kg	20	7/27/2018 3:54:03 PM	39452

**Lab ID:** 1807C41-005

**Collection Date:** 7/12/2018 9:15:00 AM

**Client Sample ID:** SW2

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	150	30		mg/Kg	20	7/27/2018 4:06:28 PM	39452

**Lab ID:** 1807C41-006

**Collection Date:** 7/12/2018 9:30:00 AM

**Client Sample ID:** SW3

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	32	30		mg/Kg	20	7/27/2018 4:18:53 PM	39452

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

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

**Analytical Report**Lab Order: **1807C41**Date Reported: **8/6/2018****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller & Associates**Lab Order:** 1807C41**Project:** Candelario**Lab ID:** 1807C41-007**Collection Date:** 7/12/2018 9:45:00 AM**Client Sample ID:** SW4**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**Analyst: **MRA**

Chloride	ND	30		mg/Kg	20	7/27/2018 4:56:06 PM	39452
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**Lab ID:** 1807C41-008**Collection Date:** 7/12/2018 10:00:00 AM**Client Sample ID:** SW5**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**Analyst: **MRA**

Chloride	120	30		mg/Kg	20	7/27/2018 5:08:32 PM	39452
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**Lab ID:** 1807C41-009**Collection Date:** 7/12/2018 10:30:00 AM**Client Sample ID:** SW6**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**Analyst: **MRA**

Chloride	ND	30		mg/Kg	20	7/27/2018 5:20:56 PM	39452
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1807C41

06-Aug-18

Client: Souder, Miller &amp; Associates

Project: Candelario

Sample ID	MB-39452		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	39452		RunNo:	53018				
Prep Date:	7/27/2018		Analysis Date:	7/27/2018		SeqNo:	1744997		Units:		mg/Kg
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-39452		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 39452		RunNo: 53018					
Prep Date:	7/27/2018		Analysis Date: 7/27/2018		SeqNo: 1744998		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

## Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1807C41

RcptNo: 1

Received By: Isaiah Ortiz

7/24/2018 9:15:00 AM

IO

Completed By: Ashley Gallegos

7/24/2018 12:57:18 PM

Ag

Reviewed By: ENM

7/24/18

labeled by:

JAB 07/24/18

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. 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

JAB 07/24/18

### Special Handling (if applicable)

15. 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:

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			





# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1808H37**

Date Reported:

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Cell 1

**Project:** Candelario EMR

**Collection Date:** 8/23/2018 10:00:00 AM

**Lab ID:** 1808H37-001

**Matrix:** SOIL

**Received Date:** 8/29/2018 11:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	4500	150		mg/Kg	100	8/31/2018 1:37:22 PM	40085
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2018 11:48:05 AM	40075
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2018 11:48:05 AM	40075
Surr: DNOP	104	50.6-138		%Rec	1	8/31/2018 11:48:05 AM	40075
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2018 12:24:54 PM	40054
Surr: BFB	92.0	15-316		%Rec	1	8/30/2018 12:24:54 PM	40054
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/30/2018 12:24:54 PM	40054
Toluene	ND	0.048		mg/Kg	1	8/30/2018 12:24:54 PM	40054
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2018 12:24:54 PM	40054
Xylenes, Total	ND	0.097		mg/Kg	1	8/30/2018 12:24:54 PM	40054
Surr: 4-Bromofluorobenzene	91.1	80-120		%Rec	1	8/30/2018 12:24:54 PM	40054

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1808H37**

Date Reported:

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Cell 2

**Project:** Candelario EMR

**Collection Date:** 8/24/2018 9:00:00 AM

**Lab ID:** 1808H37-002

**Matrix:** SOIL

**Received Date:** 8/29/2018 11:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	2000	75		mg/Kg	50	8/31/2018 1:49:46 PM	40085
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/31/2018 12:12:50 PM	40075
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2018 12:12:50 PM	40075
Surr: DNOP	97.7	50.6-138		%Rec	1	8/31/2018 12:12:50 PM	40075
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2018 12:48:15 PM	40054
Surr: BFB	90.2	15-316		%Rec	1	8/30/2018 12:48:15 PM	40054
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/30/2018 12:48:15 PM	40054
Toluene	ND	0.048		mg/Kg	1	8/30/2018 12:48:15 PM	40054
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2018 12:48:15 PM	40054
Xylenes, Total	ND	0.097		mg/Kg	1	8/30/2018 12:48:15 PM	40054
Surr: 4-Bromofluorobenzene	89.1	80-120		%Rec	1	8/30/2018 12:48:15 PM	40054

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1808H37**

Date Reported:

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Cell 3

**Project:** Candelario EMR

**Collection Date:** 8/24/2018 9:45:00 AM

**Lab ID:** 1808H37-003

**Matrix:** SOIL

**Received Date:** 8/29/2018 11:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	2200	75		mg/Kg	50	8/31/2018 2:02:11 PM	40085
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/31/2018 12:37:49 PM	40075
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2018 12:37:49 PM	40075
Surr: DNOP	102	50.6-138		%Rec	1	8/31/2018 12:37:49 PM	40075
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/30/2018 1:11:35 PM	40054
Surr: BFB	93.7	15-316		%Rec	1	8/30/2018 1:11:35 PM	40054
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/30/2018 1:11:35 PM	40054
Toluene	ND	0.047		mg/Kg	1	8/30/2018 1:11:35 PM	40054
Ethylbenzene	ND	0.047		mg/Kg	1	8/30/2018 1:11:35 PM	40054
Xylenes, Total	ND	0.094		mg/Kg	1	8/30/2018 1:11:35 PM	40054
Surr: 4-Bromofluorobenzene	91.7	80-120		%Rec	1	8/30/2018 1:11:35 PM	40054

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1808H37**

Date Reported:

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Cell 4

**Project:** Candelario EMR

**Collection Date:** 8/24/2018 10:30:00 AM

**Lab ID:** 1808H37-004

**Matrix:** SOIL

**Received Date:** 8/29/2018 11:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	9600	300		mg/Kg	200	8/31/2018 2:14:35 PM	40085
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/31/2018 1:02:29 PM	40075
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	8/31/2018 1:02:29 PM	40075
Surr: DNOP	97.2	50.6-138		%Rec	1	8/31/2018 1:02:29 PM	40075
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/30/2018 1:34:56 PM	40054
Surr: BFB	92.0	15-316		%Rec	1	8/30/2018 1:34:56 PM	40054
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	8/30/2018 1:34:56 PM	40054
Toluene	ND	0.050		mg/Kg	1	8/30/2018 1:34:56 PM	40054
Ethylbenzene	ND	0.050		mg/Kg	1	8/30/2018 1:34:56 PM	40054
Xylenes, Total	ND	0.099		mg/Kg	1	8/30/2018 1:34:56 PM	40054
Surr: 4-Bromofluorobenzene	90.8	80-120		%Rec	1	8/30/2018 1:34:56 PM	40054

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

<b>Qualifiers:</b>	*	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 Quantitative 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.

## Analytical Report

Lab Order **1808H37**

Date Reported:

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** Cell 5

**Project:** Candelario EMR

**Collection Date:** 8/24/2018 11:20:00 AM

**Lab ID:** 1808H37-005

**Matrix:** SOIL

**Received Date:** 8/29/2018 11:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	2300	75		mg/Kg	50	8/31/2018 2:26:59 PM	40085
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/31/2018 1:27:21 PM	40075
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2018 1:27:21 PM	40075
Surr: DNOP	103	50.6-138		%Rec	1	8/31/2018 1:27:21 PM	40075
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/30/2018 5:05:39 PM	40054
Surr: BFB	94.0	15-316		%Rec	1	8/30/2018 5:05:39 PM	40054
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	8/30/2018 5:05:39 PM	40054
Toluene	ND	0.050		mg/Kg	1	8/30/2018 5:05:39 PM	40054
Ethylbenzene	ND	0.050		mg/Kg	1	8/30/2018 5:05:39 PM	40054
Xylenes, Total	ND	0.10		mg/Kg	1	8/30/2018 5:05:39 PM	40054
Surr: 4-Bromofluorobenzene	94.2	80-120		%Rec	1	8/30/2018 5:05:39 PM	40054

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

<b>Qualifiers:</b>	*	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 Quantitative 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

# WASTE MANIFESTS

## Rockcliff Energy LLC Weights Statement - Total

<u>Receive Date</u>	<u>Manifest Number</u>	<u>Lease Name</u>	<u>Weight (lbs)</u>	<u>Weight (Tons)</u>
5/3/2018	122877	Rockcliff Transfer Line	79 080	39 54
5/3/2018	122878	Rockcliff Transfer Line	87 240	43 62
5/3/2018	122879	Rockcliff Transfer Line	95 590	47 80
<b>TOTALS</b>			<b>261 910</b>	<b>130 96</b>
			<b>lbs</b>	<b>Tons</b>

**Lea Land Landfill New Mexico**  
Mile Market # 64 US Highway 62/180  
30 miles East of Carlsbad NM (505) 887 4048

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

ACCIDENT

NO 122877

PAGE OF

2. TRAILER NO.

22

G E E	3. COMPANY NAME <b>Rockwell Energy, LLC</b>	4. ADDRESS <b>1301 McGurney St. # 1300</b>	5. PICK-UP DATE <b>5/2/2018</b>
	PHONE NO. <b>(743) 354-0600</b>	CITY STATE ZIP <b>Houston TX 77010</b>	6. TNRCC ID NO.

E R A	7. NAME OR DESCRIPTION OF WASTE SHIPPED	8. CONTAINERS No. Type	9. TOTAL GROSS WT.	10. NET WT.
	<b>Waste Oil, Petroleum Waste</b>	<b>1 CM</b>		

E R A	11. EXEMPTION OR SPECIAL INSTRUCTIONS <b>ROCKWELL TRANSFER LINE</b>	12. WASTE PROBLEM

E R A	13. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME PHONE NO. <b>575-887-4048</b>	24. HOUR OF EMERGENCY

GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by motor vehicle in accordance with applicable federal, state, and national government regulations, including applicable state regulations, and are the same materials previously accepted by LEA Land, LLC.

E R A	14. PRINTED/TYPED NAME	SIGNATURE	DATE

T R A N S P O R T E R S	16. TRANSPORTER (1) NAME: <b>C.A.M. SERVICES</b> TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: <b>LUIS</b> EMERGENCY PHONE	17. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE

T R A N S P O R T E R S	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME <b>Christopher Lawrence</b> SIGNATURE <b>[Signature]</b> DATE <b>5/2/2018</b>	19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE

D I S P O S I T O R Y	Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

D I S P O S I T O R Y	PERMIT NO. <b>WM-01-035 - New Mexico</b>	20. COMMENTS

D I S P O S I T O R Y	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that this facility is authorized and permitted to receive such wastes.	AUTHORIZED SIGNATURE <b>[Signature]</b> CELL NO. DATE <b>5/2/2018</b> TIME <b>9:25</b>

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Pera's*

NO 122878

1. PAGE OF

2. TRAILER NO.

0013

G	3. COMPANY NAME <b>Rockwell Energy, LLC</b>		4. ADDRESS <b>1301 McOmney St. #1300</b>		5. PICK-UP DATE <b>02/20/10</b>
	PHONE NO. <b>(781) 421-0000</b>		CITY <b>Houston</b>	STATE <b>TX</b>	ZIP <b>77040</b>
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED <b>Non-Hazardous Waste</b>				8. CONTAINERS No. <b>1</b> Type <b>CM</b>
R	9. COMMENTS OR SPECIAL INSTRUCTIONS <b>to 87240</b>				13. WASTE PROFILE
O	IN CASE OF EMERGENCY OR SPILL, CONTACT				
	PHONE NO. <b>575-887-4048</b>				
R	GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway, air, rail, water, or international and national government regulations, including applicable state regulations, and are the same materials previously approved by EPA.				
	PRINTED/TYPED NAME		SIGNATURE		DATE
T	16. TRANSPORTER (1)		17. TRANSPORTER (2)		
	NAME: <b>CAL SERVICE</b>		NAME:		
R	TEXAS I.D. NO.		TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT: <b>LUIS</b>		IN CASE OF EMERGENCY CONTACT:		
S	18. TRANSPORTER (1): Acknowledgment of receipt of material		19. TRANSPORTER (2): Acknowledgment of receipt of material		
	PRINTED/TYPED NAME: <b>Ismael Ruelas</b>		PRINTED/TYPED NAME:		
D	SIGNATURE: <b>Ismael Ruelas</b> DATE: <b>02/20/10</b>		SIGNATURE: DATE:		
	Lea Land, LLC		ADDRESS Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 575-887-4048
F	PERMIT NO. WM-01-035 - New Mexico		20. COMMENTS		
	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility that the facility is authorized and permitted to receive such wastes.				
A	AUTHORIZED SIGNATURE: <b>[Signature]</b>		CELL NO.	DATE: <b>02/20/10</b>	TIME: <b>05</b>

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1







## Rockcliff Energy LLC Weights Statement - Total

<i>Receive Date</i>	<i>Manifest Number</i>	<i>Lease Name</i>	<i>Weight (lbs.)</i>	<i>Weight (Tons)</i>
5/4/2018	122888	Rockcliff Transfer Line	124,520	62.26
5/4/2018	122889	Rockcliff Transfer Line	117,940	58.97
5/4/2018	122894	Rockcliff Transfer Line	39,280	19.64
5/4/2018	122895	Rockcliff Transfer Line	29,680	14.84
5/7/2018	122896	Rockcliff Transfer Line	74,000	37.00
5/7/2018	122897	Rockcliff Transfer Line	72,860	36.43
5/7/2018	122898	Rockcliff Transfer Line	129,080	64.54
5/7/2018	122899	Rockcliff Transfer Line	151,100	75.55
5/8/2018	122923	Rockcliff Transfer Line	60,880	30.44
5/8/2018	122924	Rockcliff Transfer Line	66,580	33.29
5/8/2018	122925	Rockcliff Transfer Line	134,760	67.38
5/8/2018	122926	Rockcliff Transfer Line	110,640	55.32
5/9/2018	122944	Rockcliff Transfer Line	49,080	24.54
5/9/2018	122945	Rockcliff Transfer Line	88,300	44.15
5/9/2018	122946	Rockcliff Transfer Line	51,540	25.77
5/9/2018	122947	Rockcliff Transfer Line	110,540	55.27
<b>TOTALS:</b>			<b>1,410,780</b>	<b>705.39</b>
			<i>lbs.</i>	<i>Tons</i>

**Lea Land Landfill New Mexico**

Mile Market # 64 US Highway 62/180

30 miles East of Carlsbad, NM \* (505) 887-4048

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Peraza's

NON-HAZARDOUS WASTE MANIFEST NO 122888 1. PAGE OF 2. TRAILER NO. 0013

G E N E R A T O R	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>	4. ADDRESS <b>1301 McKinney St. #1300</b>	5. PICK-UP DATE <b>5/4/2018</b>			
	PHONE NO. <b>(713) 361-0500</b>	CITY <b>Houston</b>	STATE <b>TX</b>	ZIP <b>77010</b>		
N E R E G U L A T E D	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. <b>Non-Regulated, Non Hazardous Waste</b>		1 CM			
	b.					
	c.					
A U T H O R I Z E D	d. <b>40820 45920 37780</b>					
	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>		13. WASTE PROFILE NO.			
T R A N S P O R T E R S	14. IN CASE OF EMERGENCY OR SPILL, CONTACT					
	NAME <b>JOE ONTIVEROS</b>		PHONE NO <b>575-887-4048</b>		24-HOUR EMERGENCY NO.	
D I S P O S I T A L Y	15. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC					
	PRINTED/TYPED NAME			SIGNATURE		DATE
D I S P O S I T A L Y	16. TRANSPORTER (1)			17. TRANSPORTER (2)		
	NAME: <b>C &amp; M SERVICES</b>			NAME:		
D I S P O S I T A L Y	TEXAS I.D. NO.			TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT: <b>LUIS</b>			IN CASE OF EMERGENCY CONTACT:		
D I S P O S I T A L Y	EMERGENCY PHONE: <b>(575) 441-2880</b>			EMERGENCY PHONE:		
	18. TRANSPORTER (1): Acknowledgment of receipt of material			19. TRANSPORTER (2): Acknowledgment of receipt of material		
D I S P O S I T A L Y	PRINTED/TYPED NAME <b>Angel Peraza</b>			PRINTED/TYPED NAME		
	SIGNATURE <b>[Signature]</b> DATE <b>5/4/2018</b>			SIGNATURE DATE		
D I S P O S I T A L Y	Lea Land, LLC		ADDRESS: <b>Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM</b>		PHONE: <b>575-887-4048</b>	
	PERMIT NO. <b>WM-01-035 - New Mexico</b>		20. COMMENTS			
D I S P O S I T A L Y	21. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
	AUTHORIZED SIGNATURE <b>[Signature]</b>		CELL NO.		DATE <b>5/4/2018</b>	TIME <b>8:40</b>

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3  
COPY 1

TRANSPORTERS: COPIES 4 & 5

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Peraza's

NON-HAZARDOUS WASTE MANIFEST

NO 122889

1. PAGE OF

2. TRAILER NO.

01

G E N E R A T O R	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>	4. ADDRESS <b>1301 McKinney St. # 1300</b>	5. PICK-UP DATE <b>5/4/2018</b>
	PHONE NO. <b>(713) 351-0500</b>	CITY STATE ZIP <b>Houston TX 77010</b>	6. TNRCC I.D. NO.

N E R A T O R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. <b>Non-Regulated, Non Hazardous Waste</b>	1 CM			
	b.				
	c.				

R A T O R	d. <b>38040 35140 44760</b>				
	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>	13. WASTE PROFILE NO. <b>TP 117,940</b>			

T R A N S P O R T E R	14. IN CASE OF EMERGENCY OR SPILL, CONTACT		
	NAME <b>JOE ONTIVEROS</b>	PHONE NO. <b>575-887-4048</b>	24-HOUR EMERGENCY NO.

15. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

R A T O R	PRINTED/TYPED NAME	SIGNATURE	DATE

T R A N S P O R T E R	16. TRANSPORTER (1)	17. TRANSPORTER (2)
	NAME: <b>C &amp; M SERVICES</b>	NAME:
	TEXAS I.D. NO.	TEXAS I.D. NO.
	IN CASE OF EMERGENCY CONTACT: <b>LUIS</b>	IN CASE OF EMERGENCY CONTACT:

T R A N S P O R T E R	18. TRANSPORTER (1): Acknowledgment of receipt of material	19. TRANSPORTER (2): Acknowledgment of receipt of material
	PRINTED/TYPED NAME <b>Jesús Mendoza</b>	PRINTED/TYPED NAME

D I S P O S I T A R Y	Lea Land, LLC	ADDRESS: <b>Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM</b>	PHONE: <b>575-887-4048</b>
	PERMIT NO. <b>WM-01-035 - New Mexico</b>	20. COMMENTS	

D I S P O S I T A R Y	21. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.	
	AUTHORIZED SIGNATURE <b>Santos Gonzalez</b>	CELL NO. <b>5/4/2018</b>

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Dennis*

### NON-HAZARDOUS WASTE MANIFEST

NO **122894**

1. PAGE    OF   

2. TRAILER NO. **11**

3. COMPANY NAME  
**Rockcliff Energy, LLC**

4. ADDRESS  
**1301 McKinney St. # 1300**

5. PICK-UP DATE  
**5/4/2018**

PHONE NO.  
**(713) 351-0500**

CITY STATE ZIP  
**Houston TX 77010**

6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

8. CONTAINERS  
No. Type

9. TOTAL  
QUANTITY

10. UNIT  
Wt/Vol.

11. TEXAS  
WASTE ID #

**Non-Regulated, Non Hazardous Waste**

**1**

**CM**

b.

c.

d.

12. COMMENTS OR SPECIAL INSTRUCTIONS:  
**ROCKCLIFF TRANSFER LINE**

13. WASTE PROFILE NO.

### 14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME  
**JOE ONTIVEROS**

PHONE NO.  
**575-887-4048**

24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME

SIGNATURE

DATE

### 16. TRANSPORTER (1)

NAME:

**C & M SERVICES**

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

**LUIS**

EMERGENCY PHONE:

**(575) 441-2880**

### 17. TRANSPORTER (2)

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

18. **TRANSPORTER (1):** Acknowledgment of receipt of material

19. **TRANSPORTER (2):** Acknowledgment of receipt of material

PRINTED/TYPED NAME

PRINTED/TYPED NAME

SIGNATURE

DATE

SIGNATURE

DATE

**Lea Land, LLC**

ADDRESS:

**Mile Marker 64, U.S. Hwy 62/180,  
30 Miles East of Carlsbad, NM**

PHONE:

**575-887-4048**

PERMIT NO.

**WM-01-035 - New Mexico**

20. COMMENTS

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE

CELL NO.

DATE **5/4/2018**

TIME

**10:30**

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Perazas*

<b>NON-HAZARDOUS WASTE MANIFEST</b>		NO <b>122895</b>	1. PAGE <b>1</b> OF <b>1</b>	2. TRAILER NO. <b>10</b>	
<b>G E N E R A T O R</b>	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St. # 1300</b>		5. PICK-UP DATE <b>5/4/2018</b>
	PHONE NO. <b>(713) 351-0500</b>		CITY <b>Houston</b>	STATE <b>TX</b>	ZIP <b>77010</b>
	6. TNRCC I.D. NO.				
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				
	8. CONTAINERS No. Type				
<b>T R A N S P O R T E R  S</b>	Non-Regulated, Non-Hazardous Waste		1 CM		
	b.				
	c.				
	d. <b>15,420 14,260</b>				
	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>		13. WASTE PROFILE NO.		
<b>D I S P O S I T Y</b>	14. IN CASE OF EMERGENCY OR SPILL, CONTACT				
	NAME <b>JOE ONTIVEROS</b>		PHONE NO. <b>575-887-4048</b>		24-HOUR EMERGENCY NO.
	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC				
	PRINTED/TYPED NAME		SIGNATURE		DATE
	16. TRANSPORTER (1) NAME: <b>C &amp; M SERVICES</b> TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: <b>LUIS</b> EMERGENCY PHONE: <b>(575) 441-2880</b>		17. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:		
<b>D I S P O S I T Y</b>	18. TRANSPORTER (1): Acknowledgment of receipt of material		19. TRANSPORTER (2): Acknowledgment of receipt of material		
	PRINTED/TYPED NAME <b>Rogelio Perazas</b>		PRINTED/TYPED NAME		
	SIGNATURE <b>[Signature]</b> DATE <b>5/4/2018</b>		SIGNATURE DATE		
	Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 575-887-4048
	PERMIT NO. <b>WM-01-035 - New Mexico</b>		20. COMMENTS		
<b>D I S P O S I T Y</b>	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.				
	AUTHORIZED SIGNATURE <b>[Signature]</b>		CELL NO.	DATE <b>5/4/2018</b>	TIME <b>10:35</b>

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Perezas*

### NON-HAZARDOUS WASTE MANIFEST

NO **122896**

1. PAGE    OF   

2. TRAILER NO. **09**

#### 3. COMPANY NAME

**Rockcliff Energy, LLC**

PHONE NO. **(743) 354-0500**

#### 4. ADDRESS

**1301 McKinney St. #1300**

CITY **Houston** STATE **TX** ZIP **77040**

#### 5. PICK-UP DATE

**5/7/2018**

#### 6. TNRCC I.D. NO.

#### 7. NAME OR DESCRIPTION OF WASTE SHIPPED:

a. **Non-Regulated, Non Hazardous Waste**

b.

c.

d. **20,040 28,740 25,220**

#### 8. CONTAINERS

No. **1**

Type **CM**

#### 9. TOTAL QUANTITY

#### 10. UNIT Wt/Vol.

#### 11. TEXAS WASTE ID #

#### 12. COMMENTS OR SPECIAL INSTRUCTIONS:

**ROCKCLIFF TRANSFER LINE**

*To 74000*

#### 13. WASTE PROFILE NO.

#### 14. IN CASE OF EMERGENCY OR SPILL, CONTACT

##### NAME

**JOE ONTIVEROS**

##### PHONE NO

**575-887-4048**

##### 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

#### PRINTED/TYPED NAME

#### SIGNATURE

#### DATE

#### 16. TRANSPORTER (1)

##### NAME:

**C & M SERVICES**

##### TEXAS I.D. NO.

##### IN CASE OF EMERGENCY CONTACT:

**LUIS**

##### EMERGENCY PHONE:

**(575) 444-2880**

#### 18. TRANSPORTER (1): Acknowledgment of receipt of material

##### PRINTED/TYPED NAME

*Flor Perezas*

##### SIGNATURE

##### DATE

**5/7/2018**

#### 17. TRANSPORTER (2)

##### NAME:

##### TEXAS I.D. NO.

##### IN CASE OF EMERGENCY CONTACT:

##### EMERGENCY PHONE:

#### 19. TRANSPORTER (2): Acknowledgment of receipt of material

##### PRINTED/TYPED NAME

##### SIGNATURE

##### DATE

**Lea Land, LLC**

##### ADDRESS:

**Mile Marker 64, U.S. Hwy 62/180,  
30 Miles East of Carlsbad, NM**

##### PHONE:

**575-887-4048**

##### PERMIT NO.

**WM-01-035 - New Mexico**

#### 20. COMMENTS

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

##### AUTHORIZED SIGNATURE

*Dante Gonzalez*

##### CELL NO.

##### DATE

**5/7/2018**

##### TIME

**8:55**

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Pernitas*

NON-HAZARDOUS WASTE MANIFEST

NO 122897

1. PAGE OF

2. TRAILER NO.

11

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3. COMPANY NAME

Rockcliff Energy, LLC

PHONE NO.

(713) 351-0500

4. ADDRESS

1301 McKinney St. # 1300

CITY

STATE

ZIP

Houston

TX

77010

5. PICK-UP DATE

5/7/2018

6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

a. Non-Regulated, Non-Hazardous Waste

b.

c.

d. 24,780 26,140 21,940

8. CONTAINERS  
No. Type

1

CM

9. TOTAL  
QUANTITY

10. UNIT  
Wt/Vol.

11. TEXAS  
WASTE ID #

12. COMMENTS OR SPECIAL INSTRUCTIONS:

ROCKCLIFF TRANSFER LINE

*to 72860*

13. WASTE PROFILE NO.

14.

IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME

PHONE NO

24-HOUR EMERGENCY NO.

JOE ONTIVEROS

575-887-4048

15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME

SIGNATURE

DATE

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16. TRANSPORTER (1)

NAME:

C & M SERVICES

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

LUIS

EMERGENCY PHONE:

(575) 441-2880

18. TRANSPORTER (1): Acknowledgment of receipt of material

PRINTED/TYPED NAME

*Rogelio P. P. R.*

SIGNATURE

DATE

5/7/2018

17. TRANSPORTER (2)

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

19. TRANSPORTER (2): Acknowledgment of receipt of material

PRINTED/TYPED NAME

SIGNATURE

DATE

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Lea Land, LLC

ADDRESS:

Mile Marker 64, U.S. Hwy 62/180,  
30 Miles East of Carlsbad, NM

PHONE:

575-887-4048

PERMIT NO.

WM-01-035 - New Mexico

20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE

*Santos Gonzalez*

CELL NO.

DATE

5/7/2018

TIME

9:10

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Peraza's*

<b>NON-HAZARDOUS WASTE MANIFEST</b>		NO <b>122898</b>	1. PAGE <b>1</b> OF <b>1</b>	2. TRAILER NO. <b>0013</b>
GENERATOR	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St. #1300</b>	
	PHONE NO. <b>(713) 351-0500</b>		CITY STATE ZIP <b>Houston TX 77010</b>	
	5. PICK-UP DATE <b>5/7/2018</b>		6. TNRCC I.D. NO.	
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY
	a. <b>Non-Regulated, Non-Hazardous Waste</b>		1	CM
TRANSPORTER	b.			
	c.			
	d. <b>46,580 42,480 40,020</b>			
	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>		13. WASTE PROFILE NO. <b>to 129,080</b>	
	14. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME PHONE NO. 24-HOUR EMERGENCY NO. <b>JOE ONTIVEROS 575-887-4048</b>			
DISPOSAL SITE	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC			
	PRINTED/TYPED NAME		SIGNATURE	
	DATE			
	16. TRANSPORTER (1) NAME: <b>C &amp; M SERVICES</b> TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: <b>LUIS</b> EMERGENCY PHONE: <b>(575) 441-2880</b>		17. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	
	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME <b>Angel Peraza</b> SIGNATURE <i>[Signature]</i> DATE <b>5/7/2018</b>		19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE	
20. COMMENTS				
DISPOSAL SITE	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.			
	AUTHORIZED SIGNATURE <i>[Signature]</i>		CELL NO.	DATE <b>5/7/2018</b>
	TIME <b>9:15</b>			
	Lea Land, LLC		Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	
	PHONE: <b>575-887-4048</b>			

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1



# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Peraza's*

NON-HAZARDOUS WASTE MANIFEST

NO **122899**

1. PAGE OF

2. TRAILER NO.

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3. COMPANY NAME

**Rockcliff Energy, LLC**

PHONE NO.

**(713) 351-0500**

4. ADDRESS

**1301 McKinney St. # 1300**

CITY

STATE

ZIP

**Houston**

**TX**

**77010**

5. PICK-UP DATE

**5/7/2018**

6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

a. **Non-Regulated, Non Hazardous Waste**

b.

c.

d. **51,940 47,560 51,600**

8. CONTAINERS

No.

Type

9. TOTAL

QUANTITY

10. UNIT

Wt/Vol.

11. TEXAS

WASTE ID #

**1**

**CM**

12. COMMENTS OR SPECIAL INSTRUCTIONS:

**ROCKCLIFF TRANSFER LINE**

**To 151,100**

13. WASTE PROFILE NO.

14.

IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME

PHONE NO

24-HOUR EMERGENCY NO.

**JOE ONTIVEROS**

**575-887-4048**

15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME

SIGNATURE

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16. TRANSPORTER (1)

NAME:

**C & M SERVICES**

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

**LUIS**

EMERGENCY PHONE:

**(575) 441-2880**

17. TRANSPORTER (2)

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

18. TRANSPORTER (1): Acknowledgment of receipt of material

19. TRANSPORTER (2): Acknowledgment of receipt of material

PRINTED/TYPED NAME

*Jesús Mendoza*

PRINTED/TYPED NAME

SIGNATURE

*Jesús Mendoza*

DATE

**5/7/2018**

SIGNATURE

DATE

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**Lea Land, LLC**

ADDRESS:

**Mile Marker 64, U.S. Hwy 62/180,  
30 Miles East of Carlsbad, NM**

PHONE:

**575-887-4048**

PERMIT NO.

**WM-01-035 - New Mexico**

20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE

*Santa Montalvo*

CELL NO.

DATE

**5/7/2018**

TIME

**9:35**

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Peraza's*

<b>NON-HAZARDOUS WASTE MANIFEST</b>		NO <b>122923</b>		1. PAGE <u>  </u> OF <u>  </u>		2. TRAILER NO. <b>#9</b>	
<b>G E N E R A T O R</b>	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St. # 1300</b>		5. PICK-UP DATE <b>5/8/2018</b>		
	PHONE NO. <b>(713) 351-0500</b>		CITY STATE ZIP <b>Houston TX 77010</b>		6. TNRCC I.D. NO.		
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.
	a. <b>Non-Regulated, Non Hazardous Waste</b>				1	CM	
	b.						
<b>R E C E I V E R</b>	c.						
	d. <b>15900 22980 22,000</b>						
	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>				13. WASTE PROFILE NO.		
	14. <b>IN CASE OF EMERGENCY OR SPILL, CONTACT</b>						
	NAME PHONE NO. 24-HOUR EMERGENCY NO. <b>JOE ONTIVEROS 575-887-4048</b>						
15. <b>GENERATOR'S CERTIFICATION:</b> I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC							
PRINTED/TYPED NAME				SIGNATURE		DATE	
<b>T R A N S P O R T E R S</b>	16. <b>TRANSPORTER (1)</b>		17. <b>TRANSPORTER (2)</b>				
	NAME: <b>C &amp; M SERVICES</b>		NAME:				
	TEXAS I.D. NO.		TEXAS I.D. NO.				
	IN CASE OF EMERGENCY CONTACT: <b>LUIS</b>		IN CASE OF EMERGENCY CONTACT:				
	EMERGENCY PHONE: <b>(575) 441-2880</b>		EMERGENCY PHONE:				
18. <b>TRANSPORTER (1):</b> Acknowledgment of receipt of material				19. <b>TRANSPORTER (2):</b> Acknowledgment of receipt of material			
PRINTED/TYPED NAME <b>Flor Peraza</b>				PRINTED/TYPED NAME			
SIGNATURE <i>[Signature]</i> DATE <b>5/8/2018</b>				SIGNATURE DATE			
<b>D I S P O S I T O R Y</b>	Lea Land, LLC		ADDRESS: <b>Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM</b>		PHONE: <b>575-887-4048</b>		
	PERMIT NO. <b>WM-01-035 - New Mexico</b>		20. COMMENTS				
	21. <b>DISPOSAL FACILITY'S CERTIFICATION:</b> I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.						
	AUTHORIZED SIGNATURE <i>[Signature]</i>		CELL NO.		DATE <b>5/8/2018</b>		TIME <b>915</b>

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Perazis*

<b>NONHAZARDOUS WASTE MANIFEST</b>		NO <b>122924</b>	1. PAGE <b>1</b> OF <b>1</b>	2. TRAILER NO. <b>#11</b>	
<b>GENERATOR</b>	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St. #1300</b>		5. PICK-UP DATE <b>5/8/2018</b>
	PHONE NO. <b>(713) 351-0500</b>		CITY <b>Houston</b>	STATE <b>TX</b>	ZIP <b>77010</b>
	6. TNRCC I.D. NO.				
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol
	11. TEXAS WASTE ID #				
<b>NON-REGULATED</b>	Non-Regulated, Non Hazardous Waste		1	CM	
	b.				
	c.				
	d. <b>19,080 24200 23300</b>				
<b>REMARKS</b>	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>		13. WASTE PROFILE NO.		
	<b>TEL 6580</b>				
<b>TRANSPORTER</b>	14. IN CASE OF EMERGENCY OR SPILL, CONTACT				
	NAME <b>JOE ONTIVEROS</b>		PHONE NO. <b>575-887-4048</b>		24-HOUR EMERGENCY NO.
<b>DISPOSAL</b>	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC				
	PRINTED/TYPED NAME		SIGNATURE		DATE
<b>TRANSPORTER</b>	16. TRANSPORTER (1)		17. TRANSPORTER (2)		
	NAME: <b>C &amp; M SERVICES</b>		NAME:		
	TEXAS I.D. NO.		TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT: <b>LUIS</b>		IN CASE OF EMERGENCY CONTACT:		
<b>DISPOSAL</b>	EMERGENCY PHONE: <b>(575) 441-2880</b>		EMERGENCY PHONE:		
	18. TRANSPORTER (1): Acknowledgment of receipt of material		19. TRANSPORTER (2): Acknowledgment of receipt of material		
	PRINTED/TYPED NAME <b>Rogelio Perazis</b>		PRINTED/TYPED NAME		
	SIGNATURE <i>Rogelio P</i>		SIGNATURE		
<b>DISPOSAL</b>	DATE <b>5/8/2018</b>		DATE		
	Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: <b>575-887-4048</b>
	PERMIT NO. <b>WM-01-035 - New Mexico</b>		20. COMMENTS		
	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.				
<b>DISPOSAL</b>	AUTHORIZED SIGNATURE <i>Joe Ontiveros</i>		CELL NO.	DATE <b>5/8/2018</b>	TIME <b>9:20</b>

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Perez's*

NON-HAZARDOUS WASTE MANIFEST		NO	122925	1. PAGE	OF	2. TRAILER NO.	#01
G E N E R A T O R	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St. #1300</b>		5. PICK-UP DATE <b>5/8/2018</b>		
	PHONE NO. <b>(713) 351-0500</b>		CITY STATE ZIP <b>Houston TX 77010</b>		6. TNRCC I.D. NO.		
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:			8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. <b>Non-Regulated, Non-Hazardous Waste</b>			1 CM			
	b.						
T R A N S P O R T E R  S	c.						
	d. <b>35,140 53,900 45,720</b>						
	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>				13. WASTE PROFILE NO.		
	14. <b>IN CASE OF EMERGENCY OR SPILL, CONTACT</b>						
	NAME <b>JOE.ONTIVEROS</b>		PHONE NO. <b>575-887-4048</b>		24-HOUR EMERGENCY NO.		
D I S P O S I T A R Y	15. <b>GENERATOR'S CERTIFICATION:</b> I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC						
	PRINTED/TYPED NAME		SIGNATURE		DATE		
	16. <b>TRANSPORTER (1)</b>		17. <b>TRANSPORTER (2)</b>				
	NAME: <b>C &amp; M SERVICES</b>		NAME:				
	TEXAS I.D. NO.		TEXAS I.D. NO.				
IN CASE OF EMERGENCY CONTACT:		IN CASE OF EMERGENCY CONTACT:					
EMERGENCY PHONE: <b>(575) 441-2880</b>		EMERGENCY PHONE:					
18. <b>TRANSPORTER (1):</b> Acknowledgment of receipt of material		19. <b>TRANSPORTER (2):</b> Acknowledgment of receipt of material					
PRINTED/TYPED NAME <b>Jesús Mendoza</b>		PRINTED/TYPED NAME					
SIGNATURE <b>Jesús Mendoza</b>		SIGNATURE		DATE <b>5/8/2018</b>			
Lea Land, LLC		ADDRESS: <b>Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM</b>		PHONE: <b>575-887-4048</b>			
PERMIT NO. <b>WM-01-035 - New Mexico</b>		20. COMMENTS					
21. <b>DISPOSAL FACILITY'S CERTIFICATION:</b> I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.							
AUTHORIZED SIGNATURE <b>Joe Ontiveros</b>		CELL NO.		DATE <b>5/8/2018</b>		TIME <b>9:35</b>	

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Peraza's*

### NON-HAZARDOUS WASTE MANIFEST

NO **122926**

1. PAGE     OF    

2. TRAILER NO. **#0013**

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3. COMPANY NAME  
**Rockcliff Energy, LLC**

PHONE NO.  
**(713) 351-0500**

4. ADDRESS  
**1301 McKinney St. #1300**

CITY STATE ZIP  
**Houston TX 77010**

5. PICK-UP DATE  
**5/8/2018**

6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

**Non-Regulated, Non-Hazardous Waste**

8. CONTAINERS  
No. Type

**1 CM**

9. TOTAL  
QUANTITY

10. UNIT  
Wt/Vol.

11. TEXAS  
WASTE ID #

b.

c.

d.

**3336D 4082D 3646D**

12. COMMENTS OR SPECIAL INSTRUCTIONS:

**ROCKCLIFF TRANSFER LINE**

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME  
**JOE ONTIVEROS**

PHONE NO.  
**575-887-4048**

24-HOUR EMERGENCY NO.

15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME

SIGNATURE

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16. TRANSPORTER (1)

NAME:

**C & M SERVICES**

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

**LUIS**

EMERGENCY PHONE:

**(575) 441-2880**

17. TRANSPORTER (2)

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

18. TRANSPORTER (1): Acknowledgment of receipt of material

PRINTED/TYPED NAME

*Angel Peraza*

SIGNATURE

DATE

**5/8/2018**

19. TRANSPORTER (2): Acknowledgment of receipt of material

PRINTED/TYPED NAME

SIGNATURE

DATE

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Lea Land, LLC

ADDRESS:

Mile Marker 64, U.S. Hwy 62/180,  
30 Miles East of Carlsbad, NM

PHONE:

**575-887-4048**

PERMIT NO.

**WM-01-035 - New Mexico**

20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE

*Joe Ontiveros*

CELL NO.

DATE **5/8/2018**

TIME

**9:55**

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Rock Perazas*

NON-HAZARDOUS WASTE MANIFEST NO. **122944** 1. PAGE    OF    2. TRAILER NO. **9**

<b>G</b>	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>	4. ADDRESS <b>1301 McKinney St. # 1300</b>	5. PICK-UP DATE <b>5/9/2018</b>
	PHONE NO. <b>(713) 351-0500</b>	CITY <b>Houston</b> STATE <b>TX</b> ZIP <b>77010</b>	6. TNRCC I.D. NO.

<b>E</b> <b>N</b> <b>E</b> <b>R</b>	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	<b>Non-Regulated, Non Hazardous Waste</b>	<b>1 CM</b>			
	b.				
	c.				

<b>A</b> <b>T</b>	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>	13. WASTE PROFILE NO.
	<b>To 49080</b>	

<b>O</b> <b>R</b>	14. IN CASE OF EMERGENCY OR SPILL, CONTACT		
	NAME <b>JOE ONTIVEROS</b>	PHONE NO. <b>575-887-4048</b>	24-HOUR EMERGENCY NO.

15. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

<b>T</b> <b>R</b> <b>A</b> <b>N</b> <b>S</b> <b>P</b> <b>O</b> <b>R</b> <b>T</b> <b>E</b> <b>R</b> <b>S</b>	16. TRANSPORTER (1) NAME: <b>C &amp; M SERVICES</b> TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: <b>LUIS</b> EMERGENCY PHONE: <b>(575) 441-2880</b>	17. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:
--	---	---

<b>D</b> <b>F</b> <b>A</b> <b>S</b> <b>C</b> <b>I</b> <b>P</b> <b>O</b> <b>L</b> <b>S</b> <b>I</b> <b>A</b> <b>T</b> <b>L</b> <b>Y</b>	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME <b>Flor Peraza</b> SIGNATURE <i>[Signature]</i> DATE <b>5/9/2018</b>	19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE
--	--	---

<b>D</b> <b>F</b> <b>A</b> <b>S</b> <b>C</b> <b>I</b> <b>P</b> <b>O</b> <b>L</b> <b>S</b> <b>I</b> <b>A</b> <b>T</b> <b>L</b> <b>Y</b>	Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
--	---------------	---	------------------------

PERMIT NO. <b>WM-01-035 - New Mexico</b>	20. COMMENTS
---	--------------

21. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.			
AUTHORIZED SIGNATURE <i>[Signature]</i>	CELL NO.	DATE <b>5/9/2018</b>	TIME <b>9:30</b>

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Pera's*

<b>NON-HAZARDOUS WASTE MANIFEST</b>		NO <b>122945</b>	1. PAGE <b>1</b> OF <b>1</b>	2. TRAILER NO. <b>0013</b>	
<b>G E N E R A T O R</b>	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>	4. ADDRESS <b>1301 McKinney St. # 1300</b>		5. PICK-UP DATE <b>5/9/2018</b>	
	PHONE NO. <b>(713) 351-0500</b>	CITY <b>Houston</b>	STATE <b>TX</b>	ZIP <b>77010</b>	
	6. TNRCC I.D. NO.				
	7. NAME OR DESCRIPTION OF WASTE SHIPPED: <b>Non-Regulated, Non-Hazardous Waste</b>		8. CONTAINERS No. <b>1</b> Type <b>CM</b>	9. TOTAL QUANTITY	10. UNIT Wt/Vol.
<b>N E C E S S A R Y</b>	b.				
	c.				
	d. <b>40,580 47,720</b>				
	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>		13. WASTE PROFILE NO. <b>88,300</b>		
<b>T R A N S P O R T E R</b>	14. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME <b>JOE ONTIVEROS</b> PHONE NO. <b>575-887-4048</b> 24-HOUR EMERGENCY NO.				
	15. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC				
<b>R E C E I V E R</b>	PRINTED/TYPED NAME		SIGNATURE		DATE
	16. TRANSPORTER (1) NAME: <b>C &amp; M SERVICES</b> TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: <b>LUIS</b> EMERGENCY PHONE: <b>(575) 441-2880</b>		17. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:		
<b>D I S P O S I T Y</b>	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME <b>Angel Perera</b> SIGNATURE <b>[Signature]</b> DATE <b>5/9/2018</b>		19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE		
	20. COMMENTS				
	21. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.				
	AUTHORIZED SIGNATURE <b>[Signature]</b>		CELL NO.	DATE <b>5/9/2018</b>	TIME <b>9:35</b>
Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 575-887-4048	
PERMIT NO. WM-01-035 - New Mexico					

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Peraza's*

### NON-HAZARDOUS WASTE MANIFEST

NO **122946**

1. PAGE **OF**

2. TRAILER NO. **11**

<b>G</b> <b>E</b> <b>N</b> <b>E</b> <b>R</b> <b>A</b> <b>T</b> <b>O</b> <b>R</b>	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St. #1300</b>		5. PICK-UP DATE <b>5/9/2018</b>	
	PHONE NO. <b>(713) 351-0500</b>		CITY STATE ZIP <b>Houston TX 77010</b>		6. TNRCC I.D. NO.	
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No. Type	9. TOTAL QUANTITY
	Non-Regulated, Non-Hazardous Waste				1 CM	
<b>T</b> <b>R</b> <b>A</b> <b>N</b> <b>S</b> <b>P</b> <b>O</b> <b>R</b> <b>T</b> <b>E</b> <b>R</b> <b>S</b>	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>				13. WASTE PROFILE NO.	
	14. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME PHONE NO. 24-HOUR EMERGENCY NO. <b>JOE ONTIVEROS 575-887-4048</b>					
	15. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC					
	PRINTED/TYPED NAME			SIGNATURE		DATE
<b>D</b> <b>I</b> <b>S</b> <b>P</b> <b>O</b> <b>S</b> <b>I</b> <b>T</b> <b>A</b> <b>L</b> <b>E</b> <b>R</b>	16. TRANSPORTER (1) NAME: <b>C &amp; M SERVICES</b> TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: <b>LUIS</b> EMERGENCY PHONE: <b>(575) 441-2880</b>		17. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:			
	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME <i>Rogelio Peraza</i> SIGNATURE <i>Rogelio Peraza</i> DATE <b>5/9/2018</b>		19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE			
	Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 575-887-4048	
	PERMIT NO. WM-01-035 - New Mexico		20. COMMENTS			
21. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.						
AUTHORIZED SIGNATURE <i>Antonio Gonzalez</i>		CELL NO.		DATE <b>5/9/2018</b> TIME <b>9:40</b>		



# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

*Perazas*

### NON-HAZARDOUS WASTE MANIFEST

NO **122947**

1. PAGE    OF   

2. TRAILER NO. **01**

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3. COMPANY NAME  
**Rockcliff Energy, LLC**

PHONE NO.  
**(713) 351-0500**

4. ADDRESS  
**1301 McKinney St. # 1300**

CITY STATE ZIP  
**Houston TX 77010**

5. PICK-UP DATE  
**5/9/2018**

6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

**Non-Regulated, Non Hazardous Waste**

8. CONTAINERS  
No. Type

**1 CM**

9. TOTAL  
QUANTITY

10. UNIT  
Wt/Vol.

11. TEXAS  
WASTE ID #

12. COMMENTS OR SPECIAL INSTRUCTIONS:  
**ROCKCLIFF TRANSFER LINE**

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME  
**JOE ONTIVEROS**

PHONE NO.  
**575-887-4048**

24-HOUR EMERGENCY NO.

15. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME

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16. TRANSPORTER (1)

NAME:

**C & M SERVICES**

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

**(575) 441-2880**

18. TRANSPORTER (1): Acknowledgment of receipt of material

PRINTED/TYPED NAME

**Jesus Mendoza**

SIGNATURE

**Jesus Mendoza**

DATE

**5/9/2018**

17. TRANSPORTER (2)

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

19. TRANSPORTER (2): Acknowledgment of receipt of material

PRINTED/TYPED NAME

SIGNATURE

DATE

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Lea Land, LLC

ADDRESS:

Mile Marker 64, U.S. Hwy 62/180,  
30 Miles East of Carlsbad, NM

PHONE:

**575-887-4048**

PERMIT NO.

**WM-01-035 - New Mexico**

20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE

**Jesus Mendoza**

CELL NO.

DATE **5/9/2018**

TIME

**9:45**

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

## Rockcliff Energy LLC Weights Statement - Total

<i>Receive Date</i>	<i>Manifest Number</i>	<i>Lease Name</i>	<i>Weight (lbs.)</i>	<i>Weight (Tons)</i>
7/19/2018	125146	Rockcliff Transfer Line	138,620	69.31
7/19/2018	125147	Rockcliff Transfer Line	173,760	86.88
7/19/2018	125148	Rockcliff Transfer Line	172,040	86.02
7/19/2018	125152	Rockcliff Transfer Line	158,680	79.34
7/19/2018	125160	Rockcliff Transfer Line	77,160	38.58
<b>TOTALS:</b>			720,260	360.13
			<i>lbs.</i>	<i>Tons</i>

**Lea Land Landfill New Mexico**  
Mile Market # 64 US Highway 62/180  
30 miles East of Carlsbad, NM \* (505) 887-4048

# LEA LAND DISPOSAL SITE NEW MEXICO

MILEMARKER #64 US HWY 62/180 - 30 MILES EAST OF CARLSBAD, NM - PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET - OKLAHOMA CITY, OK 73101 - PHONE (405) 236-1257

**Alon**

NO. **125146** PAGE OF 1 TRAILER NO. **17**

G E N E R A T O R	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1300 McKinney St. # 1300</b>		5. PICK UP DATE <b>7/19/2018</b>	
	PHONE NO. <b>(713) 361-0800</b>		CITY STATE ZIP <b>Houston TX 77010</b>		6. TIRCE ID NO.	
	7. NAME OR DESCRIPTION OF WASTE SHIPPED: <b>Non-Regulated, Non-Hazardous Waste</b>					8. CONTAINERS No. Type <b>1 CM</b>
	9. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>					10. UNIT W/WT <b>18,120</b>
T R A N S P O R T E R S	11. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME PHONE NO. 24-HOUR EMERGENCY NO. <b>JOE ONIVEROS 575-887-4048</b>					
	12. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC.					
	PRINTED/TYPED NAME			SIGNATURE		DATE
	13. TRANSPORTER (1) NAME: <b>C.A.M. SERVICES</b> TEXAS I.D. NO.: IN CASE OF EMERGENCY CONTACT: <b>LUIS</b> EMERGENCY PHONE: <b>(975) 341-2880</b>			14. TRANSPORTER (2) NAME: TEXAS I.D. NO.: IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:		
D I S P O S I T A R Y	15. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME: <b>Jorge Sanchez</b> SIGNATURE: <i>[Signature]</i> DATE: <b>7/19/2018</b>			16. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME: SIGNATURE: DATE:		
	17. LEA LAND, LLC ADDRESS: <b>Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM</b> PHONE: <b>575-887-4048</b>		18. COMMENTS			
	19. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
	20. ATTENDED SIGNATURE: <i>[Signature]</i>		CELL NO. <i>[Signature]</i>		DATE: <b>7/19/2018</b>	TIME: <b>9:15</b>

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER 64 U.S. HWY. 62/130 - 30 MILES EAST OF CARLSBAD, NM - PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET, OKLAHOMA CITY, OK 73103, PHONE (405) 236-4252

P60

NO

125147

OR

OR

2/TRANSFER NO.

02

### 1. COMPANY NAME

Rockcliff Energy, LLC

PHONE NO.

(719) 381-0500

### 4. ADDRESS

1301 McKinney St. #1300

CITY

Houston

STATE

TX

### 3. PICK-UP DATE

7/19/2018

### 6. INCOID NO.

77010

### 7. NAME OR DESCRIPTION OF WASTE SHIPPED:

Non-Regulated, Non-Hazardous Waste

42,120

42,340

43,220

46,080

### 8. CONTAINERS

No.

1

Type

CM

### 9. TOTAL QUANTITY

125,420

10. GROSS WEIGHT

11. TEXAS WASTE ID #

### 12. COMMENTS OR SPECIAL INSTRUCTIONS:

ROCKCLIFF TRANSFER LINE

### 13. WASTE PROFILE NO.

173,760

### 14.

### IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME

JOE ONTIVEROS

PHONE NO.

575-887-4048

24-HOUR EMERGENCY NO.

### 15. GENERATOR'S CERTIFICATION:

I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC.

### PRINTED/TYPED NAME

### SIGNATURE

### DATE

### 16.

### TRANSPORTER (1)

NAME

C.B.N. SERVICES

TEXAS ID NO.

IN CASE OF EMERGENCY CONTACT

EDIS

EMERGENCY PHONE

(575) 441-2860

### 18. TRANSPORTER (1): Acknowledgment of receipt of material

PRINTED/TYPED NAME

JOANNA C...

SIGNATURE

[Signature]

DATE

7/19/2018

### TRANSPORTER (2)

NAME

TEXAS ID NO.

IN CASE OF EMERGENCY CONTACT

EMERGENCY PHONE

### 19. TRANSPORTER (2): Acknowledgment of receipt of material

PRINTED/TYPED NAME

SIGNATURE

DATE

### 17.

Lea Land, LLC

### ADDRESS:

Mile Marker 64, U.S. Hwy 62/130

30 Miles East of Carlsbad, NM

### PHONE

575-887-4048

PERMIT NO.

WM-01-035 - New Mexico

### 20. COMMENTS

### 21. DISPOSAL FACILITY'S CERTIFICATION:

I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE

[Signature]

CELL NO.

DATE

7/19/2018

TIME

9:20

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER 64 U.S. HWY 62/180 - 30 MILES EAST OF CARLSBAD, NM - PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET, OKLAHOMA CITY, OK 73106 - PHONE (405) 233-4257

*Vaqueros*

NO. 125148 L. PAGE OF 2 TRAILER NO. 101

G E N E R A T O R	1. COMPANY NAME <b>Rockoff Energy, LLC</b>		2. ADDRESS <b>1301 McKinley St. # 1300</b>		3. PICK-UP DATE <b>7/10/2018</b>	
	PHONE NO. <b>(713) 851-8800</b>		CITY <b>Houston</b> STATE <b>TX</b> ZIP <b>77010</b>		4. INVOICE NO.	
	7. NAME OR DESCRIPTION OF WASTE SHIPPED		8. CONTAINERS No. Type		9. TOTAL QUANTITY	
	10. UNIT WM/Vol		11. TEXAS WASTE ID #			
T R A N S P O R T E R	Non-Regulated, Non-Hazardous Waste		f. CM			
	<u>44,540</u>					
	<u>44,360 40,500 42,600</u>					
	12. COMMENTS OR SPECIAL INSTRUCTIONS <b>ROCKCLIFF TRANSFER LINE</b>		13. WASTE PROFILE NO.			
D I S P O S I T A R Y	14. IN CASE OF EMERGENCY OR SPILL CONTACT					
	NAME <b>JOE ONTIVEROS</b>		PHONE NO. <b>575-887-4048</b>		24-HOUR EMERGENCY NO.	
	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously accepted by LEA LAND, LLC					
	PRINTED/TYPED NAME			SIGNATURE		DATE
D I S P O S I T A R Y	16. TRANSPORTER (1)			17. TRANSPORTER (2)		
	NAME <b>C.A.M. SERVICES</b>			NAME		
	TEXAS ID NO.			TEXAS ID NO.		
	IN CASE OF EMERGENCY CONTACT <b>LUIS</b>			IN CASE OF EMERGENCY CONTACT		
D I S P O S I T A R Y	EMERGENCY PHONE <b>(575) 441-2880</b>			EMERGENCY PHONE		
	18. TRANSPORTER (1): Acknowledgment of receipt of material			19. TRANSPORTER (2): Acknowledgment of receipt of material		
	PRINTED/TYPED NAME <b>Javier Paeon</b>			PRINTED/TYPED NAME		
	SIGNATURE <i>Javier Paeon</i> DATE <b>7/10/2018</b>			SIGNATURE DATE		
D I S P O S I T A R Y	Lea Land, LLC		ADDRESS <b>Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM</b>		PHONE <b>575-887-4048</b>	
	PERMIT NO. <b>WM-01-035 - New Mexico</b>		20. COMMENTS			
	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility that the facility is authorized and permitted to receive such wastes.					
	AUTHORIZED SIGNATURE <i>Antes Gonzalez</i>		OFFICE NO.		DATE <b>7/10/2018</b>	
				TIME <b>9:25</b>		



# LEA LAND DISPOSAL SITE NEW MEXICO

MILEMARKER 64 U.S. HWY 62/180 - 30 MILES EAST OF CARLSBAD, NM - PHONE (575) 887-4048

## LEA LAND, LLC

1801 WEST MAIN STREET, OKLAHOMA CITY, OK 73106 - PHONE (405) 216-4257

Pro

NO. 125152 1 PAGE OF 2 TRAILER NO. 10

G E N E R A T O R	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St # 1400</b>		5. PICK-UP DATE <b>7/19/2018</b>				
	PHONE NO. <b>(713) 361-0500</b>		CITY STATE ZIP <b>Houston TX 77010</b>		6. TRNC ID NO.				
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:					8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #
	Non-Regulated, Non Hazardous Waste					1 CM			
	38,360								
T R A N S P O R T E R S	12. COMMENTS OR SPECIAL INSTRUCTIONS <b>ROCKCLIFF TRANSFER LINE</b>					13. WASTE PROFILE NO.			
	14. IN CASE OF EMERGENCY OR SPILL CONTACT								
	NAME <b>JOE ONTIVEROS</b>		PHONE NO. <b>575-887-4048</b>		24-HOUR EMERGENCY NO.				
	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC.								
	PRINTED/TYPED NAME					SIGNATURE		DATE	
D I S P O S I T O R Y	16. TRANSPORTER (1)					17. TRANSPORTER (2)			
	NAME: <b>C.B.M. SERVICES</b>					NAME:			
	TEXAS ID NO.					TEXAS ID NO.			
	IN CASE OF EMERGENCY CONTACT: <b>(575) 401-2850</b>					IN CASE OF EMERGENCY CONTACT:			
	EMERGENCY PHONE: <b>(575) 401-2850</b>					EMERGENCY PHONE:			
18. TRANSPORTER (1): Acknowledgment of receipt of material					19. TRANSPORTER (2): Acknowledgment of receipt of material				
PRINTED/TYPED NAME: <b>Edgar S. Ruiz</b>					PRINTED/TYPED NAME:				
SIGNATURE: <b>[Signature]</b> DATE: <b>7/19/2018</b>					SIGNATURE: DATE:				
20. LEA LAND, LLC			ADDRESS: <b>Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM</b>			PHONE: <b>575-887-4048</b>			
PERMIT NO: <b>WM-01-085 - New Mexico</b>			20. COMMENTS:						
21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.									
AUTHORIZED SIGNATURE: <b>[Signature]</b>					CELL NO.		DATE: <b>7/19/2018</b>		<b>9/10</b>

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER 64 US HWY 62/180 - 30 MILES EAST OF CARLSBAD, NM - PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET - OKLAHOMA CITY, OK 73106 - PHONE (405) 236-4257

*Permit*

NO. **125160**

PAGE **OF**

TRAILER NO. **12**

G	1. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St. #1300</b>		5. PICK-UP DATE <b>7/10/2018</b>	
	PHONE NO. <b>(575) 254-0500</b>		CITY <b>Houston</b> STATE <b>TX</b> ZIP <b>77040</b>		6. TIRCOID NO.	
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED				8. CONTAINERS No. <b>1</b> Type <b>CM</b>	9. TOTAL QUANTITY
	Non-Regulated, Non-Hazardous Waste					
N					10. UNIT W/VAL	11. TEXAS WASTEID #
E						
R	12. COMMENTS OR SPECIAL INSTRUCTIONS <b>ROCKCLIFF TRANSFER LINE</b>				13. WASTE PROFILE NO.	
	<b>To TLLD</b>					
A	14. IN CASE OF EMERGENCY OR SPILL CONTACT					
	NAME <b>JOE ONTIVEROS</b>		PHONE NO. <b>575-887-4048</b>		24-HOUR EMERGENCY NO.	
O	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC.					
	PRINTED/TYPED NAME			SIGNATURE		
T	16. TRANSPORTER (1)			17. TRANSPORTER (2)		
	NAME <b>C&amp;M SERVICES</b>			NAME		
R	TEXAS ID NO.			TEXAS ID NO.		
	IN CASE OF EMERGENCY CONTACT <b>LUIS</b>			IN CASE OF EMERGENCY CONTACT		
S	EMERGENCY PHONE <b>(575) 471-5550</b>			EMERGENCY PHONE		
	18. TRANSPORTER (1): Acknowledgment of receipt of material			19. TRANSPORTER (2): Acknowledgment of receipt of material		
P	PRINTED/TYPED NAME <b>Chris Henderson</b>			PRINTED/TYPED NAME		
	SIGNATURE <i>Chris Henderson</i> DATE <b>7/10/2018</b>			SIGNATURE <i>[Signature]</i> DATE		
D	Lea Land, LLC		ADDRESS <b>Mile Marker 64, U.S. Hwy 62/180</b>		PHONE <b>575-887-4048</b>	
			<b>30 Miles East of Carlsbad, NM</b>			
I	PERMIT NO. <b>WM-01-035 - New Mexico</b>			20. COMMENTS		
S	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
	AUTHORIZED SIGNATURE <i>[Signature]</i>			CELL NO.		DATE <b>7/10/2018</b>
I				TIME <b>10:40</b>		

GENERATOR: COPIES 1 & 2

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

**FORM**

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER 64 US HWY 62/180 - 30 MILES EAST OF CARLSBAD, NM - PHONE (575) 897-4048

## LEA LAND, LLC

1300 WEST MAIN STREET - OKLAHOMA CITY, OK 73101 - PHONE (405) 236-4251

*Alon*

NO. 125183

1. PAGE 1 OF 1

2. TRAILER NO. 11

G E N E R A T O R	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St. #1300</b>		5. PICK-UP DATE <b>7/20/2018</b>	
	PHONE NO. <b>(713) 354-0800</b>		CITY <b>Houston</b>		STATE <b>TX</b>	
	ZIP <b>77001</b>		6. TIRAGOLD NO.			
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. 1 Type CM		9. TOTAL QUANTITY	
N E M E R I C A N	Non-Regulated, Non-Hazardous Wastes				10. UNIT Wt/Vol	
					11. TEXAS WASTE ID #	
	37940 41220 47580					
	12. COMMENTS OR SPECIAL INSTRUCTIONS: <b>ROCKCLIFF TRANSFER LINE</b>		13. WASTE PROFILE NO.			
T R A N S P O R T E R	14. IN CASE OF EMERGENCY OR SPILL CONTACT					
	NAME <b>JOE ONTIVEROS</b>		PHONE NO. <b>575-897-4048</b>		24-HOUR EMERGENCY NO.	
	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC					
	PRINTED/TYPED NAME		SIGNATURE		DATE	
T R A N S P O R T E R	16. TRANSPORTER (1)		17. TRANSPORTER (2)			
	NAME <b>C &amp; M SERVICES</b>		NAME			
	TEXAS I.D. NO.		TEXAS I.D. NO.			
	IN CASE OF EMERGENCY CONTACT: <b>LOIS</b>		IN CASE OF EMERGENCY CONTACT:			
D E P O S I T I O N	EMERGENCY PHONE: <b>(575) 344-2880</b>		EMERGENCY PHONE:			
	18. TRANSPORTER (1): Acknowledgment of receipt of material		19. TRANSPORTER (2): Acknowledgment of receipt of material			
	PRINTED/TYPED NAME <b>Jorge Sanchez</b>		PRINTED/TYPED NAME			
	SIGNATURE <i>[Signature]</i>		SIGNATURE			
D E P O S I T I O N	Lea Land, LLC		ADDRESS <b>Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM</b>		PHONE <b>575-897-4048</b>	
	PERMIT NO. <b>WM-01-035 - New Mexico</b>		20. COMMENTS			
	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that this facility is authorized and permitted to receive such wastes.					
	AUTHORIZED SIGNATURE <i>[Signature]</i>		GRIFF NO.		DATE <b>7-20-2018</b>	

GENERATOR: COPIES 1 & 7

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1



# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 - 30 MILES EAST OF CARLSBAD, NM - PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET, OKLAHOMA CITY, OK 73106 - PHONE (405) 236-4237

Vaqueros

NO. 125184 L/PAGE OR 2. TRAINER NO. 101

G	3. COMPANY NAME <b>Rockcliff Energy, LLC</b>		4. ADDRESS <b>1301 McKinney St. #1300</b>		5. PICK-UP DATE <b>7/20/2018</b>	
	PHONE NO. <b>(713) 251-0500</b>		CITY <b>Houston</b>	STATE <b>TX</b>	ZIP <b>77010</b>	6. INREC I.D. NO.
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED				8. CONTAINERS No. Type	9. TOTAL QUANTITY
	Non-Regulated, Non Hazardous Waste				1 CM	
N					10. UNIT W/WT	11. TEXAS WASTE ID#
D						
R	12. COMMENTS OR SPECIAL INSTRUCTIONS <b>ROCKCLIFF TRANSFER LINE</b>				13. WASTE PROFILE NO.	
	<b>39,360 412,470 50020</b>					
A						
T	14. IN CASE OF EMERGENCY OR SPILL CONTACT					
	NAME <b>JOE ONTIVEROS</b>		PHONE NO. <b>575-887-4048</b>		24 HOUR EMERGENCY NO.	
C	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC					
	PRINTED/TYPED NAME			SIGNATURE		DATE
R						
T	16. TRANSPORTER (1)			17. TRANSPORTER (2)		
	NAME: <b>CAM SERVICES</b>			NAME:		
R	TEXAS I.D. NO.			TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT			IN CASE OF EMERGENCY CONTACT		
P	EMERGENCY PHONE: <b>(870) 421-2880</b>			EMERGENCY PHONE:		
	18. TRANSPORTER (1): Acknowledgment of receipt of material			19. TRANSPORTER (2): Acknowledgment of receipt of material		
O	PRINTED/TYPED NAME: <b>Luis</b>			PRINTED/TYPED NAME:		
	SIGNATURE: <b>Luis</b> DATE: <b>7/20/2018</b>			SIGNATURE: DATE:		
R						
D	20. COMMENTS		21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.			
I	AUTHORIZED SIGNATURE		CELL NO.		DATE: <b>7/20/2018</b>	
	<b>Santa Bonaluz</b>				<b>8 35</b>	

GENERATOR: COPIES 1 & 5

DISPOSAL SITE: COPIES 1 & 3

TRANSPORTERS: COPIES 4 & 6

COPY 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILEMARKER 64 ON HWY 62/130 - 30 MILES EAST OF CARLSBAD, NM - PHONE (505) 887-4048

## LEA LAND, LLC

1900 WEST MAIN STREET - OKLAHOMA CITY, OK 73106 - PHONE (405) 236-4372

*Per 0705*

NO **125187**

PAGE **OF**

2. TRAILER NO. **12**

3. COMPANY NAME  
**Rockcliff Energy LLC**

4. ADDRESS  
**1301 McKinney St # 1300**

5. PICKUP DATE  
**7/20/2018**

PHONE NO.  
**(713) 351-0000**

CITY  
**Houston**

STATE  
**TX**

ZIP  
**77010**

6. TNRCTD. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

8. CONTAINERS

9. TOTAL QUANTITY

10. UNIT

11. TEXAS WASTEID

**Non-Regulated, Non-Hazardous Waste**

**1**

**CM**

**h**

**c**

**38800 35920**

12. COMMENTS OR SPECIAL INSTRUCTIONS:  
**ROCKCLIFF TRANSFER LINE**

13. WASTE PROBLEMS

**To 14180**

### IN CASE OF EMERGENCY OR SPILL CONTACT

14. NAME  
**JOE GONZALEZ**

PHONE NO.  
**575-887-4048**

24-HOUR EMERGENCY NO.

15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC.

PRINTED/TYPED NAME

SIGNATURE

DATE

### 16. TRANSPORTER (1)

NAME

**C.A.M. SERVICES**

TEXAS ID. NO.

IN CASE OF EMERGENCY CONTACT:

**(575) 441-2800**

EMERGENCY PHONE

17. TRANSPORTER (1): Acknowledgment of receipt of material

PRINTED/TYPED NAME

**José Hernandez**

SIGNATURE

*José Hernandez*

DATE

**7/20/2018**

### 17. TRANSPORTER (2)

NAME

TEXAS ID. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE

18. TRANSPORTER (2): Acknowledgment of receipt of material

PRINTED/TYPED NAME

SIGNATURE

DATE

**Lea Land, LLC**

ADDRESS:

**Mile Marker 64, U.S. Hwy 62/130,  
30 Miles East of Carlsbad, NM**

PHONE:

**575-887-4048**

PERMIT NO.

**WM-01-035 - New Mexico**

20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE

*[Signature]*

CELL NO.

DATE

**7/20/2018**

TIME

**8:45**

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

FORM 1

# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER 64 US HWY 62/180 - 30 MILES EAST OF CARLSBAD, NM - PHONE (575) 887-4048

## LEA LAND, LLC

1800 WEST MAIN STREET - OKLAHOMA CITY, OK 73106 - PHONE (405) 236-4257

Pro

NO. 125188		PAGE 01		2. TRAILER NO. 10	
ROCKWELL, LLC		1301 McKinney St. #1000		7/20/2018	
PHONE NO. (713) 881-0500		CITY Houston STATE TX ZIP 77010		6. TIRGOLD NO.	
7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type		9. TOTAL QUANTITY	
Non-Regulated, Non-Hazardous Wastes		1 CM			
10. CONTAINER OR TIRGOLD INSTRUCTIONS: ROCKWELL TRANSFER LINE		11. WASTE PROFILE NO.		12. WASTE PROFILE NO.	
13. IN CASE OF EMERGENCY OR SPILL, CONTACT:		24 HOUR EMERGENCY NO.			
JOE ONIVEROS 575-887-4048					
15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC.					
PRINTED/TYPED NAME		SIGNATURE		DATE	
16. TRANSPORTER (1) NAME: O.A.M. SERVICES TEXAS ID NO. LUJS		17. TRANSPORTER (2) NAME: TEXAS ID NO.		18. TRANSPORTER (1) Acknowledgment of receipt of material	
IN CASE OF EMERGENCY CONTACT: (510) 441-2880		IN CASE OF EMERGENCY CONTACT:		19. TRANSPORTER (2) Acknowledgment of receipt of material	
EMERGENCY PHONE:		EMERGENCY PHONE:		PRINTED/TYPED NAME	
19. TRANSPORTER (1) PRINTED/TYPED NAME: [Signature]		19. TRANSPORTER (2) PRINTED/TYPED NAME:		DATE: 7/20/2018	
SIGNATURE: [Signature]		SIGNATURE:		DATE:	
Lea Land, LLC		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 575-887-4048	
PERMIT NO. WM-01-035 - New Mexico		20. COMMENTS			
21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
AUTHORIZED SIGNATURE: [Signature]		CERL NO.		DATE: 7/20/2018	
TIME: 8:50					

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 1 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1



# LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER 64 US HWY 62/130 - 50 MILES EAST OF CARLSBAD, NM - PHONE (575) 887-4048

## LEA LAND, LLC

1300 WEST MAIN STREET - OKLAHOMA CITY, OK 73105 - PHONE (405) 236-4257

Red

NO 1251001 PAGE OF 2 TRAILER NO 01

G E N E R A T O R	1. COMPANY NAME <b>Rockcliff Energy, LLC</b>		2. ADDRESS <b>1301 McKinney St. # 1300</b>		3. PICK-UP DATE <b>7/20/2018</b>					
	PHONE NO. <b>(713) 401-0800</b>		CITY <b>Houston</b> STATE <b>TX</b> ZIP <b>77010</b>		4. TRUCK ID NO.					
	7. NAME OR DESCRIPTION OF WASTE SHIPPED					8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNCT W/WT	11. TEXAS WASTE ID #	
	<b>Non-Regulated, Non-Hazardous Waste</b>					<b>1</b> <b>BM</b>				
T R A N S P O R T E R S	12. COMMENTS OR SPECIAL INSTRUCTIONS <b>ROCKCLIFF TRANSFER LINE</b>					13. WASTE PROFILE NO.				
	14. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME <b>JOE GONZALEZ</b> PHONE NO. <b>575-887-4048</b> 24-HOUR EMERGENCY NO.									
	15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC.									
	PRINTED/TYPED NAME		SIGNATURE		DATE					
D I S P O S I T A R Y	16. TRANSPORTER (1) NAME <b>C.A.M. SERVICES</b>		17. TRANSPORTER (2) NAME							
	TEXAS ID NO.		TEXAS ID NO.							
	IN CASE OF EMERGENCY CONTACT EMERGENCY PHONE <b>(875) 441-2880</b>		IN CASE OF EMERGENCY CONTACT EMERGENCY PHONE							
	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME <b>JOE GONZALEZ</b> SIGNATURE <b>[Signature]</b> DATE <b>7/20/2018</b>		19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME <b>[Signature]</b> SIGNATURE <b>[Signature]</b> DATE <b>7/20/2018</b>							
Lea Land, LLC		ADDRESS: <b>Mile Marker 64, U.S. Hwy 62/130, 30 Miles East of Carlsbad, NM</b>		PHONE: <b>575-887-4048</b>						
PERMIT NO. <b>WMT01-035 - New Mexico</b>		20. COMMENTS								
21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.						AUTHORIZED SIGNATURE <b>[Signature]</b>		CELL NO. <b>[Signature]</b>	DATE <b>7/20/2018</b>	TIME <b>8:50</b>

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1