

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	
District RP	2RP-4916
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party COG Operating LLC	OGRID 229137
Contact Name Robert McNeill	Contact Telephone 432-683-7443
Contact email rmcneill@concho.com	Incident # (assigned by OCD)
Contact mailing address 600 West Illinois Avenue, Midland, TX 79701	

### Location of Release Source

Latitude 32.8248863 Longitude -103.0184937  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Burch Keely Unit #963H	Site Type Battery
Date Release Discovered 8/7/2018	API# (if applicable) 30-015-39576

Unit Letter	Section	Township	Range	County
D	19	17S	30E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 15	Volume Recovered (bbls) 2
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 15	Volume Recovered (bbls) 3
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

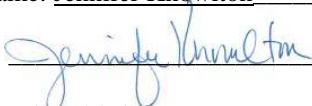
Release was caused by debris obstructing the back pressure valve.

Incident ID	
District RP	2RP-4916
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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: <u>Jennifer Knowlton</u>	Title: <u>HRL Compliance Solutions, Regional Manager</u>
Signature: <u></u>	Date: _____
email: <u>jknowlton@hrlcomp.com</u>	Telephone: <u>505-238-3588</u>
<b><u>OCD Only</u></b>	
Received by: _____	Date: _____

Incident ID	
District RP	2RP-4916
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?	80 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No

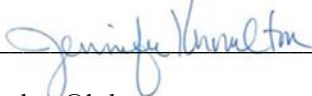
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

<p><b>Characterization Report Checklist:</b> <i>Each of the following items must be included in the report.</i></p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.</li><li><input checked="" type="checkbox"/> Field data</li><li><input checked="" type="checkbox"/> Data table of soil contaminant concentration data</li><li><input checked="" type="checkbox"/> Depth to water determination</li><li><input checked="" type="checkbox"/> Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li><li><input type="checkbox"/> Boring or excavation logs</li><li><input type="checkbox"/> Photographs including date and GIS information</li><li><input checked="" type="checkbox"/> Topographic/Aerial maps</li><li><input checked="" type="checkbox"/> Laboratory data including chain of custody</li></ul>
---

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.

Incident ID	
District RP	2RP-4916
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: Jennifer KnowltonTitle: HRL Compliance Solutions, Regional ManagerSignature: 

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

email: jknowlton@hrlcomp.comTelephone: 505-238-3588**OCD Only**

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

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



Incident ID	
District RP	2RP-4916
Facility ID	
Application ID	

## Remediation Plan

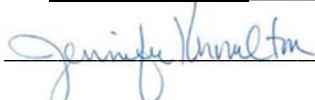
**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☒ 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: Jennifer Knowlton Title: HRL Compliance Solutions, Regional Manager  
Signature:  Date: \_\_\_\_\_  
email: jknowlton@hrlcomp.com Telephone: 505-238-3588

**OCD Only**

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

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

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

Incident ID	
District RP	2RP-4916
Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.***

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

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

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_



**SUBJECT: SOIL REMEDIATION PLAN FOR THE INCIDENT AT THE Burch Keely Unit #963H, EDDY COUNTY, NEW MEXICO**

On behalf of COG Operating, LLC, HRL Compliance Solutions, Inc (HRL) has prepared this remediation plan that describes the assessment, characterization, and proposed remediation for a release associated with the Burch Keely Unit #963H. The site is in Unit D, SECTION 19, TOWNSHIP 17S, RANGE 30E, NMPM, Eddy County, New Mexico, on State land.

### **Site Assessment/Characterization**

An assessment of surrounding water well information identifies 3 water wells within a 3-mile buffer. Depth to water at this site is estimated to be between 50 and 100 feet at the location. This information is illustrated in Attachment A.

There are no features of concern identified within proximity of the site. There is no flowing watercourse or significant watercourse within 300 feet of this location. There is no lakebed, sinkhole, or playa lake within 200 feet for this location. This location is not within 300 feet of an occupied permanent residence, school, hospital, institution, or church. This location is not within 500 feet for a spring or domestic freshwater well. This facility is not within incorporated municipal boundaries or within a defined municipal freshwater well field. This is illustrated in Attachment B.

An assessment of wetlands and springs was performed using USGS National Water Information System and re-verified utilizing a 7.5-minute topographical map. There are no wetlands within 300 feet of this location. There are no springs within 1000 feet of this location. This map is in Attachment B.

This facility is not within a 100-year floodplain as per FEMA, reference Map 35015C0400D. A portion of the FEMA map is in Attachment B.

This location is not located in an area identified in an unstable karst geology area. An area map generated with data from the USGS showing geologic units and structural features is in Attachment B.

Upon receiving clearance from the underground utility locate (811) on August 27, 2018, HRL field personnel assessed the impacted area. Samples were collected on 8/27/2018 to characterize the extent of impacts and calculate a volume of soil to be excavated for disposal with a backhoe. All samples were collected and analyzed at a National Environmental Laboratory Accreditation Program (NELAP) laboratory and in accordance with NMOCDC soil sampling procedures. The samples were submitted to Hall Laboratories for analyses including chlorides by Method 300.0, volatile organics (BTEX) by Method 8021B, and MRO, DRO, and GRO by EPA Method 8015B. Sample locations are depicted in Attachment C. All laboratory results are summarized in Table 1 with raw analytical reports included in Attachment D.



**Table 1: Analytical Results Summary**

Burch Keely 963 H Analytical Data								
Sample ID	Date	Chloride mg/Kg	Benzene mg/Kg	BTEX mg/Kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	TPH mg/Kg
S1- Surface	8/27/2018	ND	ND	ND	ND	ND	ND	ND
S1-1'	8/27/2018	170	ND	ND	ND	ND	ND	ND
S1-2'	8/27/2018	ND	-	-	-	-	-	-
S1-3'	8/27/2018	ND	-	-	-	-	-	-
S1-4'	8/27/2018	ND	-	-	-	-	-	-
S2 Surface	8/27/2018	51	ND	ND	ND	43	ND	43
S2-1'	8/27/2018	ND	ND	ND	ND	ND	ND	ND
S2-2'	8/27/2018	52	-	-	-	-	-	-
S2-3'	8/27/2018	120	-	-	-	-	-	-
S2-4'	8/27/2018	85	-	-	-	-	-	-
S3 Surface	8/27/2018	910	ND	ND	ND	3600	1700	5300
S3-1'	8/27/2018	200	ND	ND	ND	ND	ND	ND
S3-2'	8/27/2018	160	-	-	-	-	-	-
S3-3'	8/27/2018	87	-	-	-	-	-	-
S3-4'	8/27/2018	ND	-	-	-	-	-	-
S4 Surface	8/27/2018	150	ND	ND	ND	ND	ND	ND
S4-1'	8/27/2018	69	ND	ND	ND	ND	ND	ND
S4-2'	8/27/2018	38.0	-	-	-	-	-	-
S4-3'	8/27/2018	ND	-	-	-	-	-	-
S4-4'	8/27/2018	ND	-	-	-	-	-	-
S5 Surface	8/27/2018	5,800	ND	ND	ND	170	63	233
S5-1'	8/27/2018	1,100	ND	ND	ND	66	ND	66
S5-2'	8/27/2018	360	-	-	-	-	-	-
S5-3'	8/27/2018	ND	-	-	-	-	-	-
S5-4'	8/27/2018	ND	-	-	-	-	-	-
S6 Surface	8/27/2018	ND	ND	ND	ND	ND	ND	ND



### Burch Keely 963 H Analytical Data

Sample ID	Date	Chloride mg/Kg	Benzene mg/Kg	BTEX mg/Kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	TPH mg/Kg
EAST	8/27/2018	180	ND	ND	ND	ND	ND	ND
WEST	8/27/2018	ND	ND	ND	ND	ND	ND	ND
NORTH	8/27/2018	44	ND	ND	ND	140	440	580
SOUTH	8/27/2018	ND	ND	ND	ND	ND	ND	ND

### Closure Criteria Assessment

Closure Criteria		
Depth to Ground Water	Constituent	Limit
51 feet - 100 feet	Chloride	10,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

### Remediation Plan

Only the area around Sample Point 5 is above the closure criteria in Table 1. The area around Sample Point 5 will be excavated to an approximate depth of 1 foot where it doesn't impact existing production equipment. The total estimated volume of material to be removed is 65 cubic yards. A five-point composite sample will be collected from the bottom of the excavation and four side wall samples will be collected. The areas and excavated yardages may be adjusted during the excavation.

Concho is requesting a deferment of some areas of soil removal. Per 19.15.29.12.C(2), if the contamination is in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation may be deferred with approval until the equipment is removed.

The area of contamination is around the wellhead with known electric lines running through the contamination area. Concho will remove what contamination can be safely removed and leave some in place to protect equipment and electric lines.

Remediation is scheduled to begin within 90 days of approval of this remediation plan.



### **Restoration, Reclamation, and Revegetation**

All impacted areas are within an active production pad. The area will be stabilized to prevent erosion.

If there are any questions regarding this report, please contact Jennifer Knowlton at 505-238-3588.

Submitted by:  
HRL Compliance Solutions, Inc

Jennifer Knowlton  
Regional Manager - Permian



**Attachments:**

Attachment A: NMOSE Depth to Water Map and Report

Attachment B: Site Location Map

Wetlands Map

Floodplain Map

Karst Area Map

Attachment C: Sample Location Map

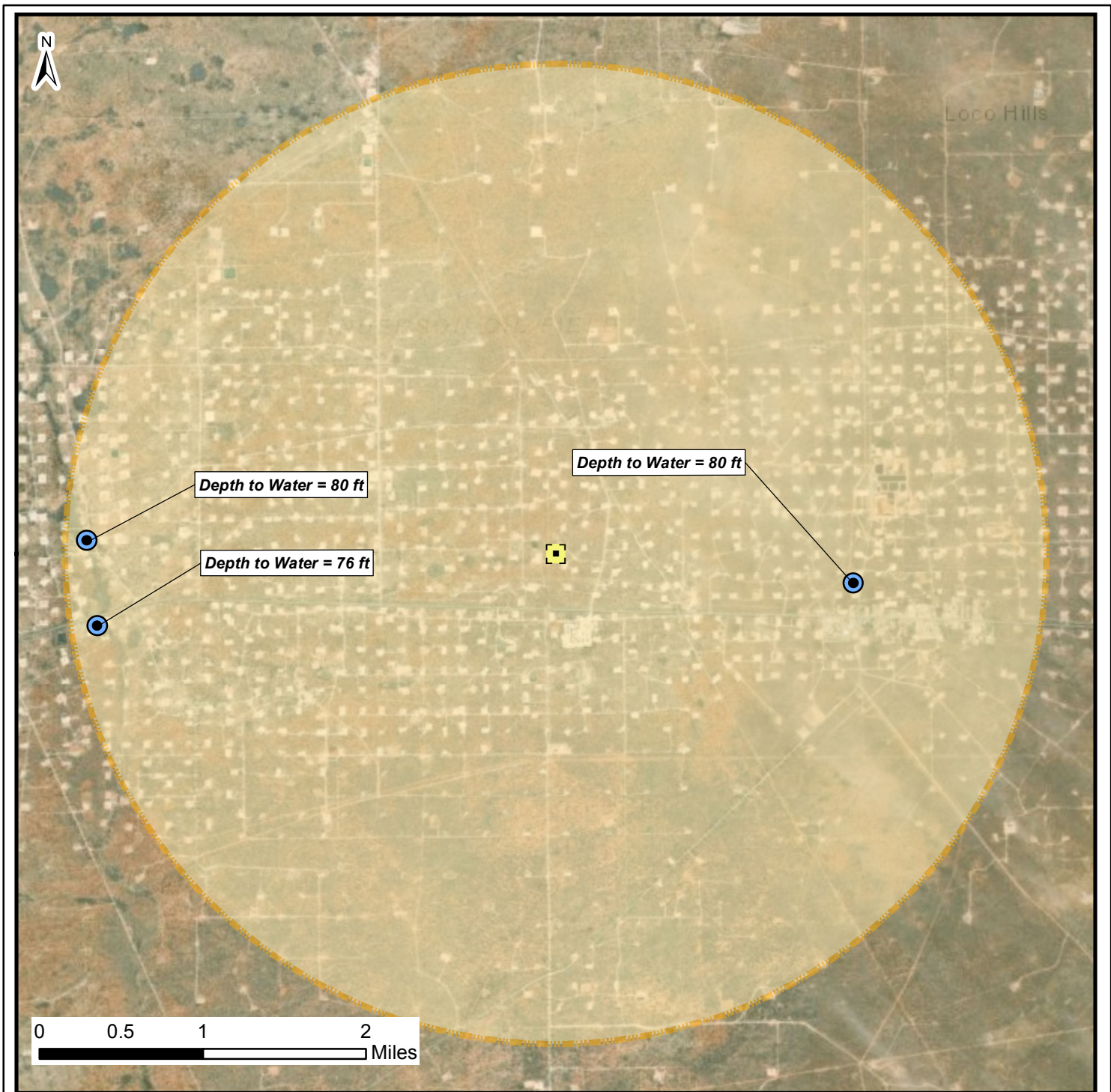
Attachment D: Laboratory Analytical Reports



**Attachment A:**

**NMOSE Depth to Water Map and Report**





## Site Location Map

Burch Keely Unit #963H

32.8248863 -104.0184937

Section 19, Township 17 South, Range 30 East

### Legend



Water Well



3 Mile Buffer



Burch Keely Unit #963H

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HCSL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantee as to the quality or accuracy of the underlying data.



**HRL**  
COMPLIANCE  
SOLUTIONS

Author: K. Fox

Revision: 0

Date: 9/26/2018



# 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="#">RA 11914 POD1</a>	RA	ED		2	4	2	20	17S	30E	594801	3632002	2945	85	80	5
<a href="#">RA 11807 POD1</a>	RA	ED		1	2	3	22	17S	29E	587360	3631585	4567	131	76	55

Average Depth to Water: **78 feet**

Minimum Depth: **76 feet**

Maximum Depth: **80 feet**

Record Count: 2

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 591870.76

**Northing (Y):** 3632300.64

**Radius:** 4828

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.

Burch Keely Unit

RA 11914	594801	3632002	80 ft
RA 11807	587360	3631585	76 ft
325210103580101		32.86944	-103.967 361.26 ft
325216103575701		32.87111	-103.966 362.44 ft
324935104040401		32.82639	-104.068 79.70 ft
324936104040501		32.82667	-104.085 70.90 ft



**Attachment B:**

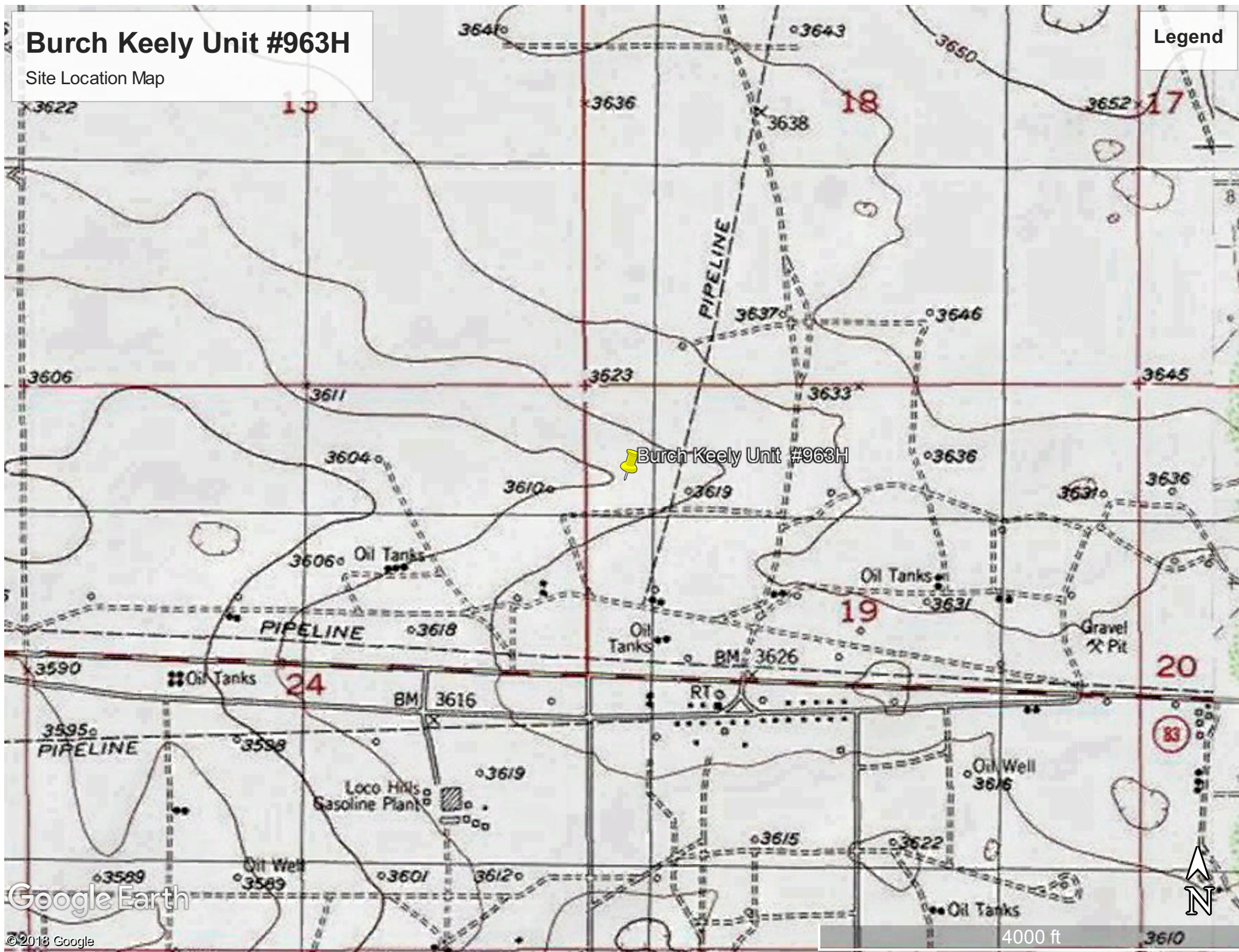
**Site Location Map  
Wetlands Map  
Floodplain Map  
Karst Area Map**



# Burch Keely Unit #963H

Site Location Map

Legend



Google Earth

© 2018 Google





U.S. Fish and Wildlife Service






# National Wetlands Inventory

## Burch Keely Unit #963H Wetlands

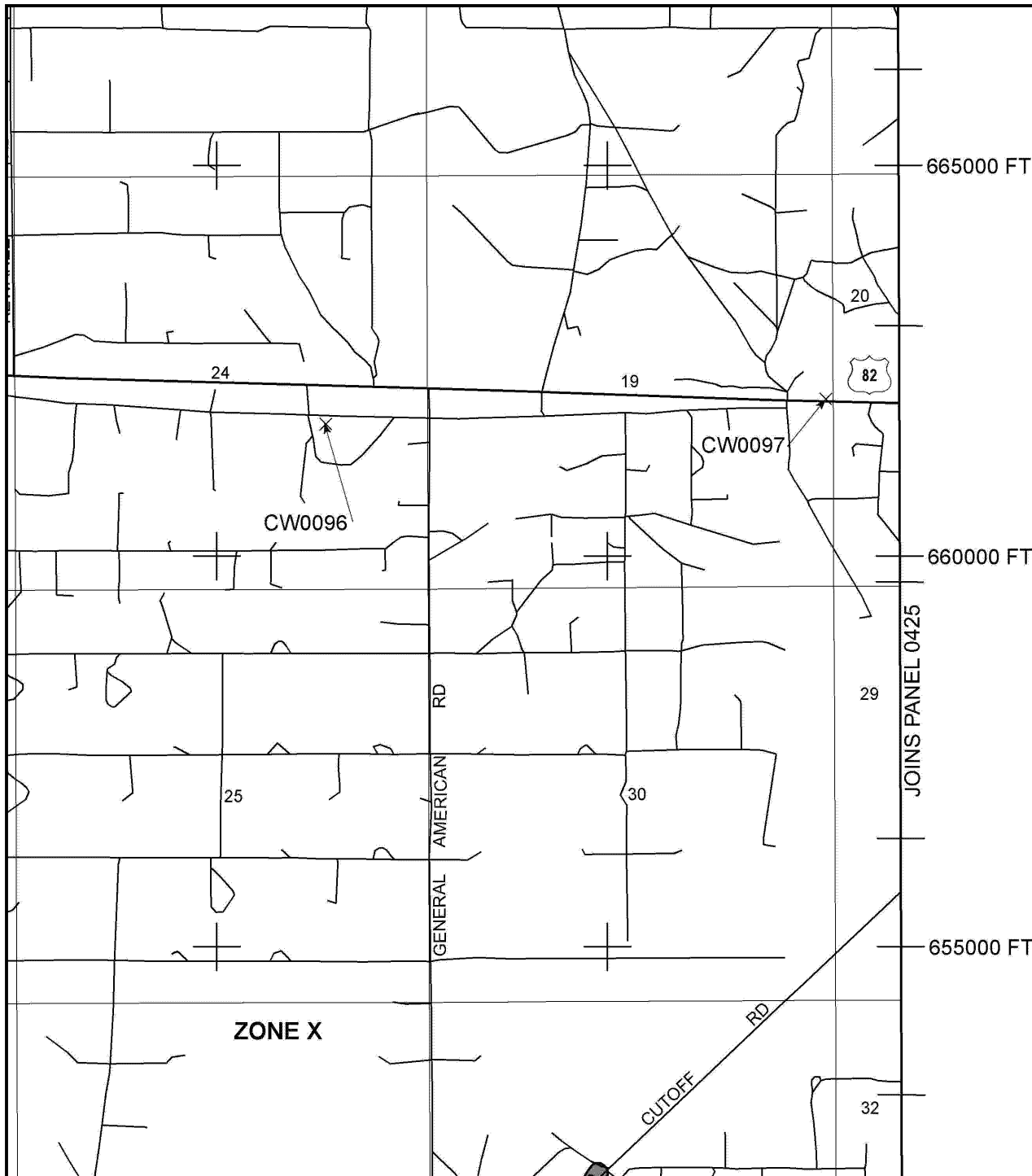


September 25, 2018

### Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

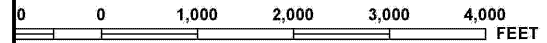
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



ance Program at 1-800-638-6620.



MAP SCALE 1" = 2000'



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0400D

**FIRM**

**FLOOD INSURANCE RATE MAP  
EDDY COUNTY,  
NEW MEXICO  
AND INCORPORATED AREAS**

**PANEL 400 OF 2000**

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
EDDY COUNTY, UNINCORPORATED AREAS	350120	0400	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



**MAP NUMBER  
35015C0400D**

**EFFECTIVE DATE  
JUNE 4, 2010**

**Federal Emergency Management Agency**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

# Burch Keely Unit #963H

Karst Map

Legend

249

31

Burch Keely Unit #963H

Loco Hills Lovington Hwy

529 Bermuda Rd

360

Google Earth

© 2018 Google

Bluestem Rd

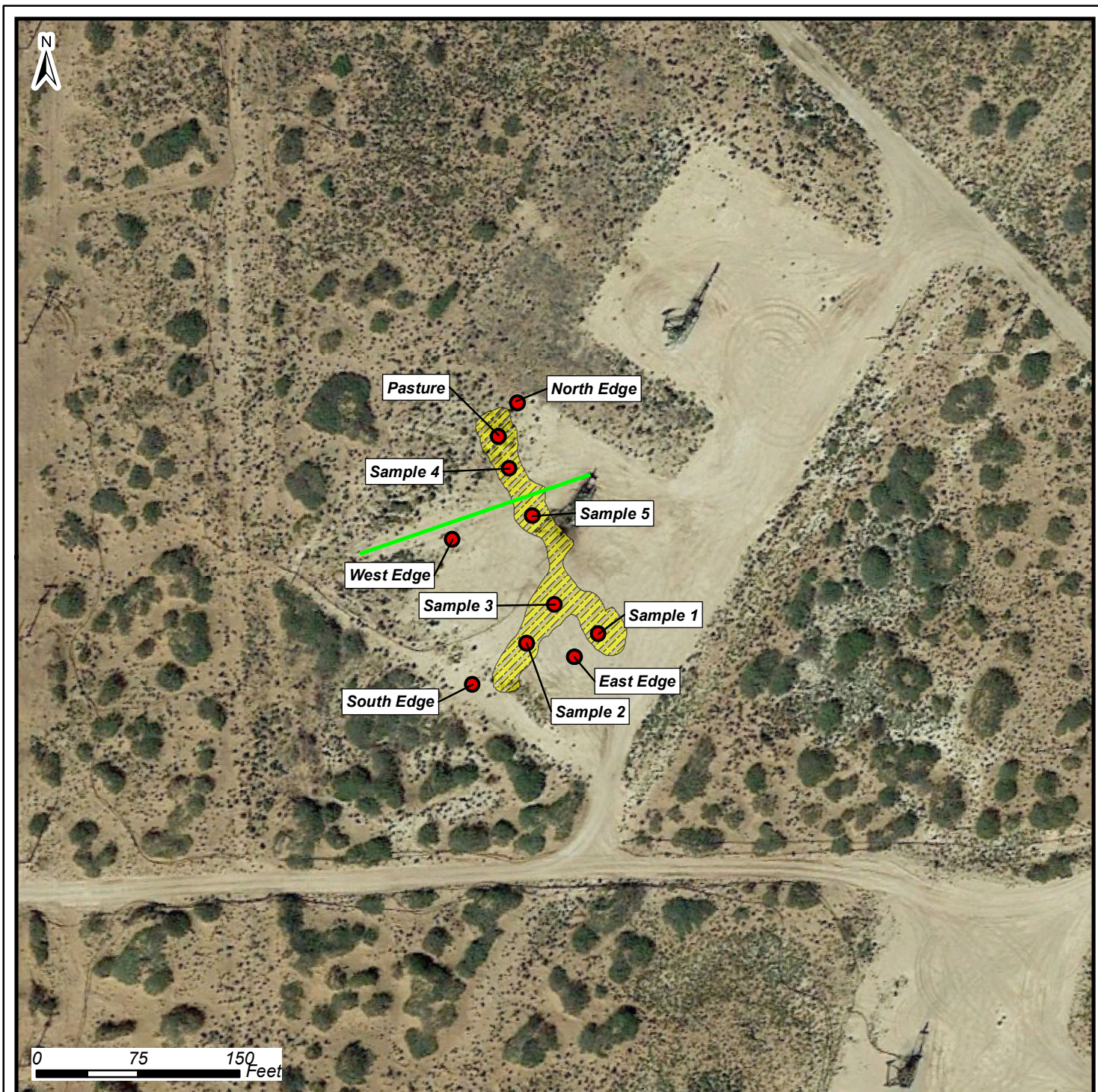


9 mi





**Attachment C:**  
**Sample Location Map**



## Sample Location Map

Burch Keely Unit #963H

32.8248863 -104.0184937

Section 19, Township 17 South, Range 30 East

### Mapped Features

- Sample Locations
- Electric Line
- Impacted Area

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HRL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantees as to the quality or accuracy of the underlying data.



**HRL**  
COMPLIANCE  
SOLUTIONS

Author: A. Asay

Revision: 0

Date: 9/6/2018



**Attachment D:**  
**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)

September 17, 2018

Jennifer Knowlton

Concho

600 W Illinois Ave

Midland, TX 79701

TEL: (505) 238-3588

FAX

RE: Burch Keely Unit 963H

OrderNo.: 1808I89

Dear Jennifer Knowlton:

Hall Environmental Analysis Laboratory received 29 sample(s) on 8/31/2018 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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S1-Surface

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-001

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2018 3:26:52 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2018 3:26:52 PM
Surr: DNOP	107	50.6-138		%Rec	1	9/6/2018 3:26:52 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/5/2018 1:28:44 AM
Surr: BFB	92.4	15-316		%Rec	1	9/5/2018 1:28:44 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/5/2018 1:28:44 AM
Toluene	ND	0.050		mg/Kg	1	9/5/2018 1:28:44 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/5/2018 1:28:44 AM
Xylenes, Total	ND	0.099		mg/Kg	1	9/5/2018 1:28:44 AM
Surr: 4-Bromofluorobenzene	87.7	80-120		%Rec	1	9/5/2018 1:28:44 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/12/2018 12:49:15 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S1-1'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-002

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/6/2018 4:33:11 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2018 4:33:11 PM
Surr: DNOP	78.0	50.6-138		%Rec	1	9/6/2018 4:33:11 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/5/2018 1:52:11 AM
Surr: BFB	91.6	15-316		%Rec	1	9/5/2018 1:52:11 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/5/2018 1:52:11 AM
Toluene	ND	0.048		mg/Kg	1	9/5/2018 1:52:11 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/5/2018 1:52:11 AM
Xylenes, Total	ND	0.096		mg/Kg	1	9/5/2018 1:52:11 AM
Surr: 4-Bromofluorobenzene	89.3	80-120		%Rec	1	9/5/2018 1:52:11 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	170	30		mg/Kg	20	9/12/2018 1:01:39 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S1-2'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-003

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/12/2018 1:14:04 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S1-3'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-004

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/12/2018 1:26:29 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S1-4'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-005

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/12/2018 1:38:54 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S2-Surface

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-006

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	43	9.6		mg/Kg	1	9/6/2018 4:55:09 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2018 4:55:09 PM
Surr: DNOP	108	50.6-138		%Rec	1	9/6/2018 4:55:09 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/5/2018 2:15:32 AM
Surr: BFB	90.5	15-316		%Rec	1	9/5/2018 2:15:32 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2018 2:15:32 AM
Toluene	ND	0.047		mg/Kg	1	9/5/2018 2:15:32 AM
Ethylbenzene	ND	0.047		mg/Kg	1	9/5/2018 2:15:32 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/5/2018 2:15:32 AM
Surr: 4-Bromofluorobenzene	87.4	80-120		%Rec	1	9/5/2018 2:15:32 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	51	30		mg/Kg	20	9/12/2018 1:51:18 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S2-1'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-007

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/6/2018 5:17:07 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2018 5:17:07 PM
Surr: DNOP	108	50.6-138		%Rec	1	9/6/2018 5:17:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/5/2018 2:38:52 AM
Surr: BFB	88.4	15-316		%Rec	1	9/5/2018 2:38:52 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/5/2018 2:38:52 AM
Toluene	ND	0.048		mg/Kg	1	9/5/2018 2:38:52 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/5/2018 2:38:52 AM
Xylenes, Total	ND	0.097		mg/Kg	1	9/5/2018 2:38:52 AM
Surr: 4-Bromofluorobenzene	84.8	80-120		%Rec	1	9/5/2018 2:38:52 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/12/2018 2:03:43 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S2-2'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-008

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	52	30		mg/Kg	20	9/12/2018 2:16:07 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S2-3'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-009

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	120	30		mg/Kg	20	9/12/2018 2:53:22 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S2-4'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-010

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	85	30		mg/Kg	20	9/12/2018 3:05:46 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S3-Surface

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-011

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	3600	96		mg/Kg	10	9/7/2018 9:33:52 AM
Motor Oil Range Organics (MRO)	1700	480		mg/Kg	10	9/7/2018 9:33:52 AM
Surr: DNOP	0	50.6-138	S	%Rec	10	9/7/2018 9:33:52 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	23	D	mg/Kg	5	9/5/2018 3:02:07 AM
Surr: BFB	128	15-316	D	%Rec	5	9/5/2018 3:02:07 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.12	D	mg/Kg	5	9/5/2018 3:02:07 AM
Toluene	ND	0.23	D	mg/Kg	5	9/5/2018 3:02:07 AM
Ethylbenzene	ND	0.23	D	mg/Kg	5	9/5/2018 3:02:07 AM
Xylenes, Total	ND	0.46	D	mg/Kg	5	9/5/2018 3:02:07 AM
Surr: 4-Bromofluorobenzene	90.5	80-120	D	%Rec	5	9/5/2018 3:02:07 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	910	30		mg/Kg	20	9/12/2018 3:18:10 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S3-1'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-012

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2018 6:23:00 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2018 6:23:00 PM
Surr: DNOP	117	50.6-138		%Rec	1	9/6/2018 6:23:00 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/5/2018 3:48:33 AM
Surr: BFB	90.5	15-316		%Rec	1	9/5/2018 3:48:33 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/5/2018 3:48:33 AM
Toluene	ND	0.048		mg/Kg	1	9/5/2018 3:48:33 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/5/2018 3:48:33 AM
Xylenes, Total	ND	0.096		mg/Kg	1	9/5/2018 3:48:33 AM
Surr: 4-Bromofluorobenzene	87.6	80-120		%Rec	1	9/5/2018 3:48:33 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	200	30		mg/Kg	20	9/12/2018 3:30:35 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S3-2'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-013

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	160	30		mg/Kg	20	9/11/2018 9:59:32 PM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S3-3'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-014

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	87	30		mg/Kg	20	9/11/2018 10:11:56 PM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S3-4'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-015

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/11/2018 10:24:21 PM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S4-Surface

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-016

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/6/2018 6:45:05 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2018 6:45:05 PM
Surr: DNOP	109	50.6-138		%Rec	1	9/6/2018 6:45:05 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/5/2018 4:11:48 AM
Surr: BFB	88.5	15-316		%Rec	1	9/5/2018 4:11:48 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2018 4:11:48 AM
Toluene	ND	0.046		mg/Kg	1	9/5/2018 4:11:48 AM
Ethylbenzene	ND	0.046		mg/Kg	1	9/5/2018 4:11:48 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/5/2018 4:11:48 AM
Surr: 4-Bromofluorobenzene	85.4	80-120		%Rec	1	9/5/2018 4:11:48 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	150	30		mg/Kg	20	9/11/2018 10:36:46 PM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S4-1'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-017

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2018 7:06:57 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2018 7:06:57 PM
Surr: DNOP	108	50.6-138		%Rec	1	9/6/2018 7:06:57 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/5/2018 4:35:07 AM
Surr: BFB	89.2	15-316		%Rec	1	9/5/2018 4:35:07 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/5/2018 4:35:07 AM
Toluene	ND	0.048		mg/Kg	1	9/5/2018 4:35:07 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/5/2018 4:35:07 AM
Xylenes, Total	ND	0.097		mg/Kg	1	9/5/2018 4:35:07 AM
Surr: 4-Bromofluorobenzene	86.1	80-120		%Rec	1	9/5/2018 4:35:07 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	69	30		mg/Kg	20	9/11/2018 11:13:59 PM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S4-2'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-018

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	38	30		mg/Kg	20	9/11/2018 11:26:24 PM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S4-3'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-019

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/11/2018 11:38:48 PM

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 **1808189**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S4-4'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808189-020

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/11/2018 11:51:13 PM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S5-Surface

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-021

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	170	9.6		mg/Kg	1	9/6/2018 7:29:04 PM
Motor Oil Range Organics (MRO)	63	48		mg/Kg	1	9/6/2018 7:29:04 PM
Surr: DNOP	110	50.6-138		%Rec	1	9/6/2018 7:29:04 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/5/2018 10:25:03 PM
Surr: BFB	124	15-316		%Rec	1	9/5/2018 10:25:03 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/5/2018 10:25:03 PM
Toluene	ND	0.049		mg/Kg	1	9/5/2018 10:25:03 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/5/2018 10:25:03 PM
Xylenes, Total	ND	0.098		mg/Kg	1	9/5/2018 10:25:03 PM
Surr: 4-Bromofluorobenzene	89.1	80-120		%Rec	1	9/5/2018 10:25:03 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	5800	300		mg/Kg	200	9/13/2018 10:38:09 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S5-1'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-022

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	66	9.5		mg/Kg	1	9/6/2018 7:51:01 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2018 7:51:01 PM
Surr: DNOP	112	50.6-138		%Rec	1	9/6/2018 7:51:01 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/5/2018 10:48:16 PM
Surr: BFB	96.6	15-316		%Rec	1	9/5/2018 10:48:16 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/5/2018 10:48:16 PM
Toluene	ND	0.048		mg/Kg	1	9/5/2018 10:48:16 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/5/2018 10:48:16 PM
Xylenes, Total	ND	0.096		mg/Kg	1	9/5/2018 10:48:16 PM
Surr: 4-Bromofluorobenzene	89.9	80-120		%Rec	1	9/5/2018 10:48:16 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	1100	75		mg/Kg	50	9/13/2018 10:50:34 AM

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 **1808189**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S5-2'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808189-023

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	360	30		mg/Kg	20	9/12/2018 12:53:15 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S5-3'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-024

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/12/2018 1:05:39 AM

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 **1808189**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** S5-4'

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808189-025

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/12/2018 1:18:04 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** East

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-026

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/6/2018 8:13:07 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2018 8:13:07 PM
Surr: DNOP	91.0	50.6-138		%Rec	1	9/6/2018 8:13:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/5/2018 11:11:31 PM
Surr: BFB	93.1	15-316		%Rec	1	9/5/2018 11:11:31 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/5/2018 11:11:31 PM
Toluene	ND	0.048		mg/Kg	1	9/5/2018 11:11:31 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/5/2018 11:11:31 PM
Xylenes, Total	ND	0.097		mg/Kg	1	9/5/2018 11:11:31 PM
Surr: 4-Bromofluorobenzene	88.2	80-120		%Rec	1	9/5/2018 11:11:31 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	180	30		mg/Kg	20	9/12/2018 1:30:29 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** West

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-027

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2018 8:35:14 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2018 8:35:14 PM
Surr: DNOP	79.4	50.6-138		%Rec	1	9/6/2018 8:35:14 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/5/2018 11:34:52 PM
Surr: BFB	93.5	15-316		%Rec	1	9/5/2018 11:34:52 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2018 11:34:52 PM
Toluene	ND	0.046		mg/Kg	1	9/5/2018 11:34:52 PM
Ethylbenzene	ND	0.046		mg/Kg	1	9/5/2018 11:34:52 PM
Xylenes, Total	ND	0.091		mg/Kg	1	9/5/2018 11:34:52 PM
Surr: 4-Bromofluorobenzene	89.8	80-120		%Rec	1	9/5/2018 11:34:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/12/2018 1:42:53 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** North

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-028

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	140	9.1		mg/Kg	1	9/6/2018 8:57:28 PM
Motor Oil Range Organics (MRO)	440	46		mg/Kg	1	9/6/2018 8:57:28 PM
Surr: DNOP	101	50.6-138		%Rec	1	9/6/2018 8:57:28 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/6/2018 1:08:13 AM
Surr: BFB	93.1	15-316		%Rec	1	9/6/2018 1:08:13 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	9/6/2018 1:08:13 AM
Toluene	ND	0.046		mg/Kg	1	9/6/2018 1:08:13 AM
Ethylbenzene	ND	0.046		mg/Kg	1	9/6/2018 1:08:13 AM
Xylenes, Total	ND	0.092		mg/Kg	1	9/6/2018 1:08:13 AM
Surr: 4-Bromofluorobenzene	87.0	80-120		%Rec	1	9/6/2018 1:08:13 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	44	30		mg/Kg	20	9/12/2018 1:55:18 AM

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 **1808I89**

Date Reported: **9/17/2018**

**CLIENT:** Concho

**Client Sample ID:** South

**Project:** Burch Keely Unit 963H

**Collection Date:** 8/27/2018

**Lab ID:** 1808I89-029

**Matrix:** SOIL

**Received Date:** 8/31/2018 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>irm</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/7/2018 9:11:38 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/7/2018 9:11:38 AM
Surr: DNOP	68.2	50.6-138		%Rec	1	9/7/2018 9:11:38 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/6/2018 1:31:35 AM
Surr: BFB	91.9	15-316		%Rec	1	9/6/2018 1:31:35 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/6/2018 1:31:35 AM
Toluene	ND	0.048		mg/Kg	1	9/6/2018 1:31:35 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/6/2018 1:31:35 AM
Xylenes, Total	ND	0.096		mg/Kg	1	9/6/2018 1:31:35 AM
Surr: 4-Bromofluorobenzene	86.8	80-120		%Rec	1	9/6/2018 1:31:35 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	ND	30		mg/Kg	20	9/12/2018 2:07:42 AM

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#: 1808I89

17-Sep-18

**Client:** Concho  
**Project:** Burch Keely Unit 963H

Sample ID	MB-40290		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 40290		RunNo: 54069					
Prep Date:	9/11/2018		Analysis Date: 9/11/2018		SeqNo: 1787596		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-40290		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 40290		RunNo: 54069					
Prep Date:	9/11/2018		Analysis Date: 9/11/2018		SeqNo: 1787597		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

Sample ID	MB-40286		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	40286		RunNo:	54095				
Prep Date:	9/11/2018		Analysis Date:	9/11/2018		SeqNo:	1787698		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-40286		SampType:	lcs		TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSS		Batch ID:	40286		RunNo:	54095				
Prep Date:	9/11/2018		Analysis Date:	9/11/2018		SeqNo:	1787699		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	94.5	90	110				

### Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical 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#: 1808I89

17-Sep-18

**Client:** Concho  
**Project:** Burch Keely Unit 963H

Sample ID	MB-40152		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 40152		RunNo: 53970					
Prep Date:	9/5/2018		Analysis Date: 9/6/2018		SeqNo: 1782303		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		108	50.6	138			

Sample ID	1808I89-001AMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	S1-Surface		Batch ID: 40152		RunNo: 53970					
Prep Date:	9/5/2018		Analysis Date: 9/6/2018		SeqNo: 1782305		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	70	10	50.76	4.777	128	53.5	126			S
Surr: DNOP	5.4		5.076		107	50.6	138			

Sample ID	1808I89-001AMSD		SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	S1-Surface		Batch ID: 40152		RunNo: 53970					
Prep Date:	9/5/2018		Analysis Date: 9/6/2018		SeqNo: 1782306		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.8	49.16	4.777	105	53.5	126	20.6	21.7	
Surr: DNOP	5.1		4.916		104	50.6	138	0	0	

Sample ID	LCS-40152		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 40152		RunNo: 53970					
Prep Date:	9/5/2018		Analysis Date: 9/6/2018		SeqNo: 1782317		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.6	70	130			
Surr: DNOP	4.9		5.000		98.6	50.6	138			

### 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#: 1808I89

17-Sep-18

**Client:** Concho  
**Project:** Burch Keely Unit 963H

Sample ID	MB-40101		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 40101		RunNo: 53896					
Prep Date:	8/31/2018		Analysis Date: 9/4/2018		SeqNo: 1778755		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	940		1000		94.2	15	316			

Sample ID	LCS-40101		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 40101		RunNo: 53896					
Prep Date:	8/31/2018		Analysis Date: 9/4/2018		SeqNo: 1778756		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	101	75.9	131			
Surr: BFB	1000		1000		103	15	316			

Sample ID	1808I53-001AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC		Batch ID: 40101		RunNo: 53896					
Prep Date:	8/31/2018		Analysis Date: 9/4/2018		SeqNo: 1778758		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.32	0	92.8	77.8	128			
Surr: BFB	1000		972.8		105	15	316			

Sample ID	1808I53-001AMSD		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC		Batch ID: 40101		RunNo: 53896					
Prep Date:	8/31/2018		Analysis Date: 9/4/2018		SeqNo: 1778759		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.52	0	95.1	77.8	128	0.836	20	
Surr: BFB	990		940.7		106	15	316	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#: 1808I89

17-Sep-18

**Client:** Concho  
**Project:** Burch Keely Unit 963H

Sample ID <b>MB-40101</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>40101</b>		RunNo: <b>53896</b>							
Prep Date: <b>8/31/2018</b>	Analysis Date: <b>9/4/2018</b>		SeqNo: <b>1778800</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	0.91		1.000		90.7	80	120			

Sample ID <b>LCS-40101</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>40101</b>		RunNo: <b>53896</b>							
Prep Date: <b>8/31/2018</b>	Analysis Date: <b>9/4/2018</b>		SeqNo: <b>1778801</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.7	77.3	128			
Toluene	0.93	0.050	1.000	0	92.6	79.2	125			
Ethylbenzene	0.92	0.050	1.000	0	91.9	80.7	127			
Xylenes, Total	2.8	0.10	3.000	0	93.0	81.6	129			
Surr: 4-Bromofluorobenzene	0.89		1.000		89.2	80	120			

Sample ID <b>1808I68-001AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>40101</b>		RunNo: <b>53896</b>							
Prep Date: <b>8/31/2018</b>	Analysis Date: <b>9/4/2018</b>		SeqNo: <b>1778803</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	83.8	68.5	133			
Toluene	0.89	0.050	1.000	0	88.8	75	130			
Ethylbenzene	0.89	0.050	1.000	0	89.0	79.4	128			
Xylenes, Total	2.7	0.10	3.000	0	91.2	77.3	131			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.2	80	120			

Sample ID <b>1808I68-001AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>40101</b>		RunNo: <b>53896</b>							
Prep Date: <b>8/31/2018</b>	Analysis Date: <b>9/4/2018</b>		SeqNo: <b>1778804</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	0.9804	0	84.5	68.5	133	1.20	20	
Toluene	0.87	0.049	0.9804	0	88.8	75	130	1.99	20	
Ethylbenzene	0.87	0.049	0.9804	0	88.8	79.4	128	2.17	20	
Xylenes, Total	2.7	0.098	2.941	0	91.4	77.3	131	1.77	20	
Surr: 4-Bromofluorobenzene	0.90		0.9804		92.2	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: CONCHO MIDLAND

Work Order Number: 1808189

RcptNo: 1

Received By: Erin Melendrez 8/31/2018 8:45:00 AM

Completed By: Michelle Garcia 8/31/2018 12:08:20 PM

Reviewed By: ENM

LB: 50 8-31-18

8/31/18

*UAG*

*Michelle Garcia*

### 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: 9/31/18  
( $>12$  unless noted)

Attached?

Checked by: ENM

### 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	2.7	Good	Yes			
2	1.9	Good	Yes			

# Chain-of-Custody Record

Client: COG

Mailing Address:

Phone #:  
email or Fax#:

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

Accreditation  
☐ NELAP ☐ Other

☐ EDD (Type)

Date	Time	Matrix	Sample Request ID
8/17/18		Soil	S1 - Surface
			S1 - 1'
			S1 - 2'
			S1 - 3'
			S1 - 4'
			S2 - Surface
			S2 - 1'
			S2 - 2'
			S2 - 3'
			S2 - 4'
			S3 - Surface
			S3 - 1'

Date: 8/10/18 0830 Relinquished by: Yungh Kim  
Date: 8/10/18 1900 Relinquished by: [Signature]

Turn-Around Time:  
☒ Standard ☐ Rush  
Project Name:  
Burch Keely Unit #963H  
Project #:

Project Manager:  
HR L

Sampler: Kevin Smith  
On Ice: ☒ Yes ☐ No

Container Type and #	Preservative Type	HEAL No.
Jar		1808189
		001
		002
		003
		004
		005
		006
		007
		008
		009
		010
		011
		012

Received by: [Signature] Date: 8/30/18 0830  
Received by: QUINCY EMM Date: 8/31/18 0845



1 of 3

## Analysis Request

BTEX + MTBE + TMBs (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 <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)	BTEX 8021B	Chlorides	Air Bubbles (Y or N)
		X									X	X	
		X									X	X	
												X	
											X	X	
											X	X	
		X									X	X	
		X									X	X	
												X	
												X	
												X	
		X									X	X	
		X									X	X	

Remarks: JKnowlton@hrlcomp.com  
COOLER 1.2.7 lcarrasco@hrlcomp.com  
COOLER 2.1.9 lcsmith@hrlcomp.com  
ENH 8/31/18 dneel@hrlcomp.com





