October 17, 2019 Vertex Project #: 19E-000614

Spill Closure Report: Rick Deckard State 25-28-4 WA #2H (Section 4, Township 25 South, Range 28 East)
API: 30-015-45344
County: Eddy
Incident Report: 2RP-5601

Prepared For: **Marathon Oil Company**
4111 S. Tidwell Road
Carlsbad, NM 88220

New Mexico Oil Conservation Division - District 2 Artesia
811 S. 1st Street
Artesia, New Mexico 88210

Marathon Oil Company (Marathon) retained Vertex Resource Services Inc. (Vertex) to conduct a Spill Assessment for Incident 2RP-5601. This incident was a release of produced water that was the result of a small leak from the bottom of an aboveground storage tank (AST) at Rick Deckard State 25-28-4 WA #2H, API 30-015-45344 (hereafter referred to as "site"). This letter provides a description of the Spill Assessment and includes a request for Spill Closure. The spill area is located at N 32.16425, W -104.09560.

Background

The site is located approximately 8.4 miles south of Loving, New Mexico on State-owned property. The legal location for the site is Unit Letter "C", Section 4, Township 25 South, Range 28 East in Eddy County, New Mexico. An aerial photograph and site schematic are included as Attachment 1.

The Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2014 – 2017) indicates the site's surface geology is comprised primarily of Pr ---- Rustler Formation (Upper Permian), and is characterized as siltstone, gypsum, sandstone and dolomite. Predominant soil texture on the site is well-drained gravelly loam to loam with the potential for some runoff.

Incident Description

The referenced release occurred on July 31, 2019, due to a small leak at the bottom of a produced water AST, resulting in the release of approximately 18.31 barrels (bbls) of produced water onto the pad. Upon discovery, an initial spill cleanup was conducted in which approximately 15 bbls of free liquid were recovered. The release was reported to New Mexico Oil Conservation Division (NM OCD) on August 14, 2019; the initial C-141 Report, 2RP-5601, is included in this document as Attachment 2. Daily Field Report (DFRs) and site photographs are included as Attachment 3.

Closure Criteria Determination

Depth to groundwater at the site was determined using information from Oil and Gas Drilling records and the New Mexico Office of the State Engineer Water Column/Average Depth to Water report. A 5,000-meter search radius was used to determine groundwater depth. The shallowest recorded depth to groundwater was determined to be 35 feet below ground surface (bgs) at 223 feet from the site. All documentation used in Closure Criteria Determination research is included as Attachment 4.

Table 1.				
Site Name: Rick Deckard State 25-28-4 WA 2H				
Spill Coordinates:		**X: 32.16430**	**Y: -104.09560**	
Site Specific Conditions		**Value**	**Unit**	**Reference**
1	Depth to Groundwater	**35**	feet	1
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	**223**	feet	2
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	8,381	feet	3
4	Within 300 feet from an occupied residence, school, hospital, institution or church	12,403	feet	4
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, **or**	3,688	feet	5
	ii) Within 1000 feet of any fresh water well or spring	12,090	feet	5
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)	6
7	Within 300 feet of a wetland	2,300	feet	7
8	Within the area overlying a subsurface mine	No	(Y/N)	8
9	Within an unstable area (Karst Map)	Medium	Critical High Medium Low	9
10	Within a 100-year Floodplain	500	year	10
NMAC 19.15.29.12 E (Table 1) Closure Criteria		<50'	<50' 51-100' >100'	

The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

Table 2. Closure Criteria for Soils Impacted by a Release		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	**Constituent**	**Limit**
< 50 feet	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

Remedial Actions Taken

Vertex completed an initial site inspection at Rick Deckard 25-28-4 WA #2H on August 3, 2019. This site inspection identified the area of the release specified in the initial C-141 Report, estimated the approximate volume of the spill, and white lined the area required for the 811 One Call request. The area impacted by this release was determined to be approximately 79 feet long and 37 feet wide; the total affected area was determined to be 2,309 square feet. The DFR associated with the site inspection is included in Attachment 3.

Remediation efforts at the site began on August 17, 2019 and were completed on September 6, 2019. Vertex personnel supervised the excavation of impacted soils. Field screening was completed on a total of 36 sample points and consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and Quantabs (chlorides). These field screen results were used to differentiate areas requiring further remediation from those areas showing concentrations below determined closure criteria levels. Soils were removed, as necessary, up to a depth of 3.5 feet bgs from areas determined to have been impacted by this release. Contaminated soil was transported off-site by a licensed waste hauler for disposal at an approved waste management facility. Waste Manifests are presented in Attachment 5. Field screening results are presented in Attachment 6, as well as in the DFRs in Attachment 3.

Notification that confirmatory samples were being collected was provided to NM OCD on August 17, 2019 and is included with this report as Attachment 7. Confirmatory five-point composite samples were collected from the base and walls of the excavation such that no composite sample was representative of more than 200 square feet per the alternate sampling method outlined in Subparagraph (c) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC. A total of thirty-six (36) samples, including three (3) background samples, were collected for laboratory analysis following NM OCD soil sampling procedures. Samples were submitted to Hall Environmental Analysis Laboratory under chain-of-custody protocols and analyzed using Method 300.0/9056A for chlorides, Method 8021B for volatile organics, including Benzene, Toluene, Ethyl benzene and Xylene (BTEX), and EPA Method 8015D for total petroleum hydrocarbons (TPH), including Motor Oil Range Organics (MRO), Diesel Range Organics (DRO), and Gasoline Range Organics (GRO). Laboratory results are presented in Table 3, Attachment 6 and the complete laboratory data report and chain of custody documentation can be found in Attachment 8. All confirmatory samples collected and analyzed were below closure criteria for the site.

Closure Request

The spill area was fully delineated, remediated and backfilled with local soils by September 6, 2019. Confirmatory samples were analyzed by a laboratory and found to be below allowable concentrations as per Table I of 19.15.29.12 NMAC - Closure Criteria for Soils Impacted by a Release for locations less than 50 feet to groundwater. Based on these findings, Marathon requests that this release be closed.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 505.506.0040 or ngordon@vertex.ca.

Sincerely,

Natalie Gordon
PROJECT MANAGER

Attachments

Attachment 1. Site Schematic
Attachment 2. NMOCD C-141 Report
Attachment 3. Daily Field Report(s) with Photos
Attachment 4. Closure Criteria for Soils Impacted by a Release Research Determination Documentation
Attachment 5. Waste Manifest(s)
Attachment 6. Table 3 - Laboratory Results Table
Attachment 7. Confirmatory Samples
Attachment 8. Laboratory Data Reports and COCs

References

Water Column/Average Depth to Water Report. New Mexico Water Rights Reporting System, (2019). Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html

Assessed and Impaired Waters of New Mexico. New Mexico Department of Surface Water Quality Bureau, (2019). Retrieved from https://gis.web.env.nm.gov/oem/?map=swqb

Interactive Geologic Map. New Mexico Bureau of Geology and Mineral Resources, (2019). Retrieved from http://geoinfo.nmt.edu

Measured Distance from the Subject Site to Residence. Google Earth Pro, (2019). Retrieved from https://earth.google.com

Point of Diversion Location Report. New Mexico Water Rights Reporting System, (2019). Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/wellSurfaceDiversion.html

Measured Distance from the Subject Site to Municipal Boundaries. Google Earth Pro, (2019). Retrieved from https://earth.google.com

National Wetland Inventory Surface Waters and Wetland. United State Fish and Wildlife Service, (2019). Retrieved from https://www.fws.gov/wetlands/data/mapper.html

Coal Mine Resources in New Mexico. NM Mining and Minerals Division, (2019). Retrieved from http://www.emnrd.state.nm.us/MMD/gismapminedata.html

New Mexico Cave/Karsts. United States Department of the Interior, Bureau of Land Management, (2019) Retrieved from https://www.blm.gov/programs/recreation/recreation-programs/caves/new-mexico

Flood Map Number 35015C1875D. United States Department of Homeland Security, FEMA Flood Map Service Center, (2010). Retrieved from https://msc.fema.gov/portal/search?AddressQuery=malaga%20new%20mexico#searchresultsanchor

Well Log/Meter Information Report. NM Office of the State Engineer, New Mexico Water Rights Reporting System. (2019). Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html

Natural Resources and Wildlife Oil and Gas Releases. New Mexico Oil Conservation Division, (2019). Santa Fe, New Mexico.

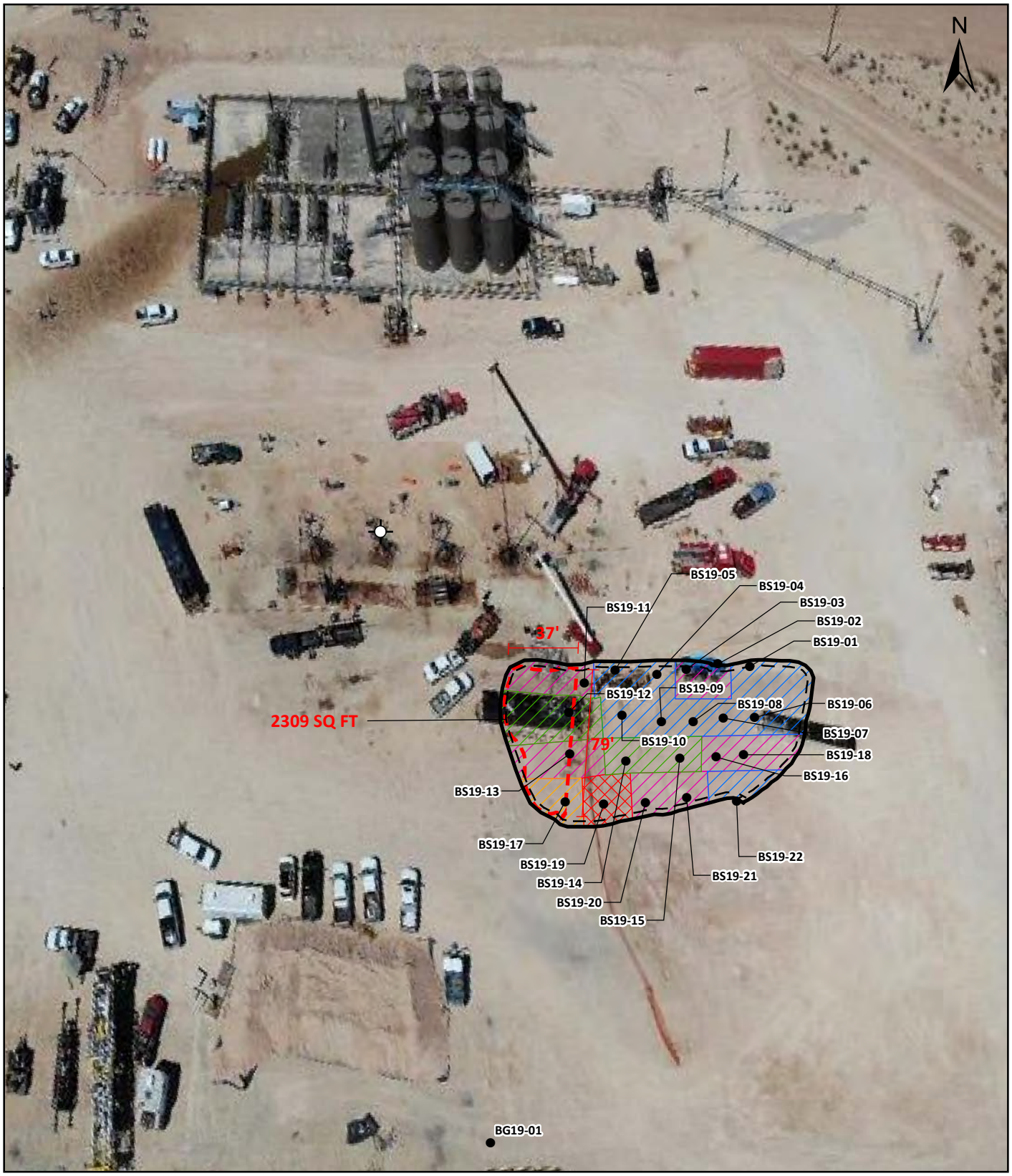
Soil Survey, New Mexico. United States Department of Agriculture, Soil Conservation Service in Cooperation with New Mexico Agricultural Experiment Station. (1971). Retrieved from http://www.wipp.energy.gov/library/Information_Repository_A/Supplemental_Information/Chugg%20et%20al%201971%20w-map.pdf

Limitations

This report has been prepared for the sole benefit of Marathon Oil Company (Marathon). This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division, without the express written consent of Vertex Resource Services Inc. (Vertex) and Marathon. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

ATTACHMENT 1



LEGEND

- SOIL SAMPLE
- WELLHEAD
- EXCAVATION
- SPILL AREA
- 0.5' EXCAVATED DEPTH
- 1.0' EXCAVATED DEPTH
- 1.5' EXCAVATED DEPTH
- 2.0' EXCAVATED DEPTH
- 3.5' EXCAVATED DEPTH

CLOSURE CRITERIA <50 FEET TO GW

BG	BACKGROUND
BS	BASE SAMPLE
TP	TEST PIT
SS	SURFACE SAMPLE

0 15 30 60 Ft

SCALE 1:900

Notes: Aerial Image from ESRI Digital Globe 2016

Marathon Oil

Final Confirmatory
Rick Deckard State
25-28-4 WA 2H

VERTEX

DRAWN:	NM
APPROVED:	AH
DATE:	OCT 03/19

FIGURE: 5

VERSATILITY. EXPERTISE.

Document Path: C:\Users\nmocny\Documents\Natasha Mocny\Projects\Marathon\Rick Deckard State 25-28-4 WA 2H\Rick Deckard State 25-28-4 Figure 5 Final.mxd

ATTACHMENT 2

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	NAB1923552658
District RP	2RP-5601
Facility ID	
Application ID	pAB1923539811

Release Notification IGQ51-190814-C-1410

Responsible Party

Responsible Party Marathon Oil Permian LLC	OGRID 372098
Contact Name Isaac Castro	Contact Telephone 575-988-0561
Contact email icastro@marathonoil.com	Incident # *(assigned by OCD)* NAB1923552658
Contact mailing address 4111 Tidwell Road, Carlsbad New Mexico, 88220	

Location of Release Source

Latitude 32.1642533 Longitude -104.09559691
(NAD 83 in decimal degrees to 5 decimal places)

Site Name RICK DECKARD STATE 25 28 4 WA #002H	Site Type Oil and gas drilling facility
Date Release Discovered 7/31/19	API# *(if applicable)* 30-015-45344

Unit Letter	Section	Township	Range	County
C	04	25S	28E	Eddie

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)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☑ Produced Water	Volume Released (bbls) 18.31	Volume Recovered (bbls) 15
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Operator reported a spill from the AST for produced water due to a small leak coming from the bottom of the tank. 18.31 bbls of produced water was spilled to the ground. All spillage is contained on location.

State of New Mexico
Oil Conservation Division

Incident ID	NAB1923552658
District RP	2RP-5601
Facility ID	
Application ID	pAB1923539811

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ 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

- ☑ The source of the release has been stopped.
- ☑ The impacted area has been secured to protect human health and the environment.
- ☑ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☑ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Isaac Castro Title: Environmental Professional

Signature: Isaac Castro Date: 8/14/19

email: icastro@marathonoil.com Telephone: 575-988-0561

OCD Only

Received by: Amalia Bustamante Date: 8/23/2019

State of New Mexico
Oil Conservation Division

Incident ID	NAB1923552658
District RP	2RP-5601
Facility ID	
Application ID	pAB1923539811

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?	35 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ 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)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ 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?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ 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.

State of New Mexico
Oil Conservation Division

Incident ID	NAB1923552658
District RP	2RP-5601
Facility ID	
Application ID	pAB1923539811

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: ISAAC CASTRO Title: ENVIRONMENTAL PROFESSIONAL

Signature: Isaac Castro Date: 10-17-19

email: ICASTRO@MARATHONOIL.COM. Telephone: 575-988-0561.

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1923552658
District RP	2RP-5601
Facility ID	
Application ID	pAB1923539811

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: ISAAC CASTRO Title: ENVIRONMENTAL PROFESSIONAL

Signature: Isaac Castro Date: 10-17-19

email: ICASTRO@MARATHONOIL.COM Telephone: 575-988-0561

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1923552658
District RP	2RP-5601
Facility ID	
Application ID	pAB1923539811

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: ISAAC CASTRO Title: ENVIRONMENTAL PROFESSIONAL

Signature: Isaac Castro Date: 10-17-19

email: ICASTRO@MARATHONOIL.COM Telephone: 575-988-0561.

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: _____

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division

Receipt of Fee Application Payment

PO Number: IGQ51-190814-C-1410

Payment Date:	8/14/2019 3:03:19 PM
Payment Amount:	$150.00
Payment Type:	Credit Card

Application Type:	Application for administrative approval of a release notification and corrective action.
Fee Amount:	$150.00
Application Status:	Under OCD Review

OGRID:	372098
First Name:	Isaac
Last Name:	Castro
Email:	icastro@marathonoil.com

IMPORTANT: If you are mailing or delivering your application, you must print and include your receipt of payment as the first page on your application. All mailed and delivered applications must be sent to the following address: 1220 S. St. Francis Dr., Santa Fe, NM 87505. For inquiries, reference the PO Number listed above.

ATTACHMENT 3

Daily Site Visit Report

Client:	Marathon Oil Permian LLC	Inspection Date:	8/3/2019
Site Location Name:	Rick Decard State 25-28-4 WA #2H	Report Run Date:	8/3/2019 7:46 PM
Project Owner:	Isaac Castro	File (Project) #:	19E-00614
Project Manager:	Dennis Williams	API #:	30-015-45344
Client Contact Name:	Callie Karrigan	Reference	AST Tank Spill
Client Contact Phone #:	(405) 202-1028		

Summary of Times

Left Office	8/3/2019 10:45 AM
Arrived at Site	8/3/2019 12:15 PM
Departed Site	8/3/2019 12:38 PM
Returned to Office	8/3/2019 1:30 PM

Summary of Daily Operations

12:21 Fill out arrival and safety forms
Map spill and take pictures
Fill out DFR
Return to office

Next Steps & Recommendations

1 Begin remediation

Daily Site Visit Report

Site Photos

Viewing Direction: Southeast

Spill area

Viewing Direction: North

Spill area

Viewing Direction: East

Spill area

Viewing Direction: North

Spill area

Daily Site Visit Report

Viewing Direction: Northeast	**Viewing Direction**: South
	
Spill area	Spill area

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Jason Crabtree

Signature: 

Daily Site Visit Report

Client:	Marathon Oil Permian LLC	Inspection Date:	8/17/2019
Site Location Name:	Rick Decard State 25-28-4 WA #2H	Report Run Date:	8/18/2019 1:15 AM
Project Owner:	Isaac Castro	File (Project) #:	19E-00614
Project Manager:	Dennis Williams	API #:	30-015-45344
Client Contact Name:	Isaac Castro	Reference	AST Tank Spill
Client Contact Phone #:	(575) 988-0561		

Summary of Times

Left Office	8/17/2019 7:35 AM
Arrived at Site	8/17/2019 8:15 AM
Departed Site	8/17/2019 5:53 PM
Returned to Office	8/17/2019 6:39 PM

Summary of Daily Operations

9:51 Arrive on site.
Complete safety paperwork.
Obtain background samples and begin excavation.
Complete DFR.
Return to office.

Next Steps & Recommendations

1 Continue excavation

2 Continue field screening

3 Schedule haul away of contaminated material

Sampling

Daily Site Visit Report

Background19-01

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0 ft.	0.4 ppm	12 ppm	Low (30-600 ppm)	32 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.163795, -104.095030	Yes
1 ft.	1.1 ppm	23 ppm	Low (30-600 ppm)	32 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.163795, -104.095030	Yes
2 ft.	1.2 ppm	27 ppm	Low (30-600 ppm)	0 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.163795, -104.095030	Yes

ES-Base19-01

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.5 ppm	3 ppm	Low (30-600 ppm)	241 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.164078, -104.094889	Yes

ES-Base19-02

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.9 ppm	22 ppm	Low (30-600 ppm)	436 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.164048, -104.094825	Yes

Daily Site Visit Report

ES-Base19-03

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.8 ppm	21 ppm	Low (30-600 ppm)	337 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16408, -104.09495	Yes

ES-Base19-04

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	1.5 ppm	59 ppm	Low (30-600 ppm)	241 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16407, -104.09502	Yes

ES-Base19-05

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.7 ppm	47 ppm	Low (30-600 ppm)	316 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16408, -104.09506	Yes

Daily Site Visit Report

Site Photos

Viewing Direction: North

Background sample at 0', 1' and 2'

Viewing Direction: East

Spill area under tank

Viewing Direction: East

Spill area under tank

Viewing Direction: Southeast

Spill area under tank

Daily Site Visit Report

Viewing Direction: East	**Viewing Direction**: East
	
Spill area under tank	Spill area under tank
Viewing Direction: East	**Viewing Direction**: Southeast
	
Excavated area	Excavated area

Daily Site Visit Report

Viewing Direction: South	**Viewing Direction**: Southwest
	
Excavated area	Excavated area
Viewing Direction: South	**Viewing Direction**: West
	
Excavated area	Excavated area

Daily Site Visit Report

Viewing Direction: Northwest	**Viewing Direction**: Northwest
	
Excavated area	Excavated area

Daily Site Visit Report

Depth Sample Photos

Sample Point ID: Background19-01

Depth: 0 ft.

Sample Point ID: Background19-01

Depth: 1 ft.

Sample Point ID: Background19-01

Depth: 2 ft.

Sample Point ID: ES-Base19-01

Depth: 0.5 ft.

Daily Site Visit Report

Sample Point ID: ES-Base19-02

Depth: 0.5 ft.

Sample Point ID: ES-Base19-03

Depth: 0.5 ft.

Sample Point ID: ES-Base19-04

Depth: 0.5 ft.

Sample Point ID: ES-Base19-05

Depth: 0.5 ft.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Austin Harris

Signature: 
Signature

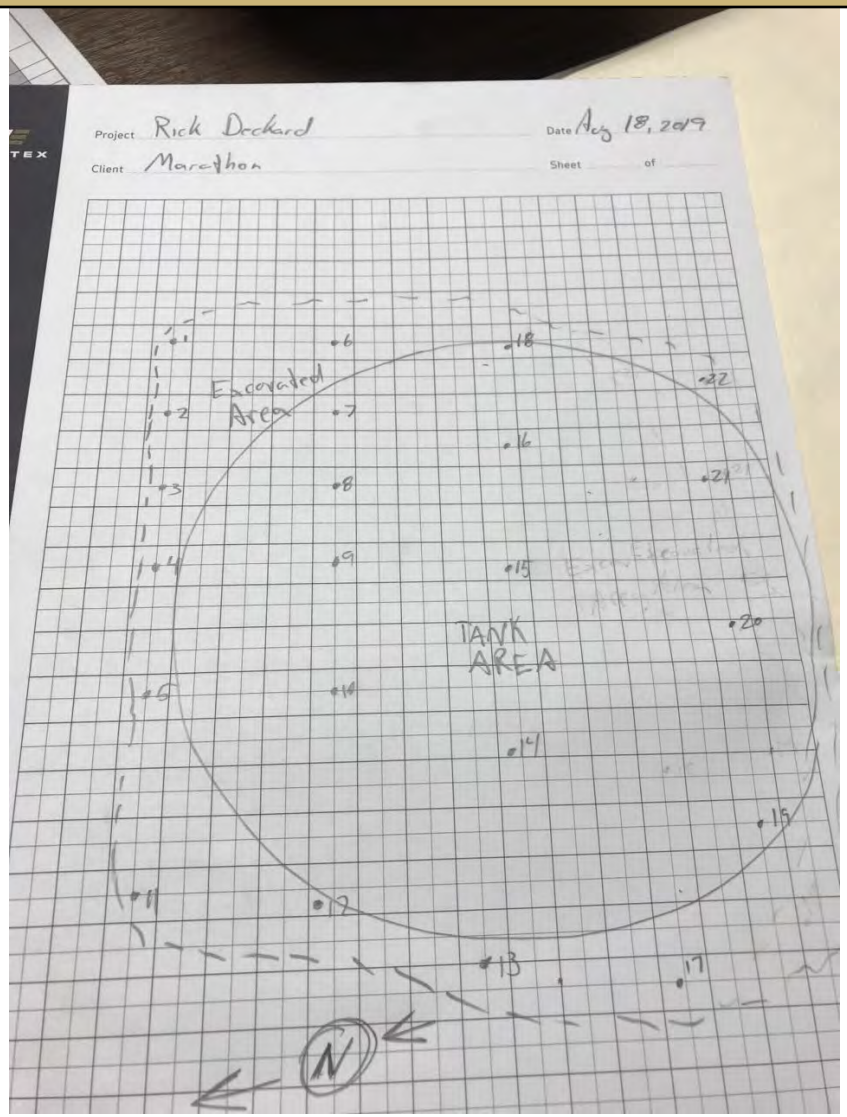
Daily Site Visit Report

Client:	Marathon Oil Permian LLC	Inspection Date:	8/18/2019
Site Location Name:	Rick Decard State 25-28-4 WA #2H	Report Run Date:	8/19/2019 1:32 AM
Project Owner:	Isaac Castro	File (Project) #:	19E-00614
Project Manager:	Dennis Williams	API #:	30-015-45344
Client Contact Name:	Isaac Castro	Reference	AST Tank
Client Contact Phone #:	(575) 988-0561		

Summary of Times	
Left Office	8/18/2019 7:00 AM
Arrived at Site	8/18/2019 7:36 AM
Departed Site	8/18/2019 6:11 PM
Returned to Office	8/18/2019 6:50 PM

Daily Site Visit Report

Site Sketch



Daily Site Visit Report

Summary of Daily Operations

7:37 Arrive on site.
Complete safety paperwork.
Continue excavation and field screening.
Complete DFR.
Return to office.

Next Steps & Recommendations

1 Schedule backfill and contaminant haul away

2 Closure report

Sampling

ES-Base19-06

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.3 ppm	42 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16397, -104.09483	Yes

ES-Base19-07

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	5.5 ppm	72 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16403, -104.09489	Yes

Daily Site Visit Report

ES-Base19-08

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.8 ppm	85 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16404, -104.09494	Yes

ES-Base19-09

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0 ppm	36 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16400, -104.09503	Yes

ES-Base19-10

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	1.3 ppm	40 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16406, -104.09513	Yes

ES-Base19-11

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	0.9 ppm	33 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16403, -104.09515	Yes

Daily Site Visit Report

ES-Base19-12

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	2.1 ppm	58 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16403, -104.09520	Yes

ES-Base19-13

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	1.5 ppm	42 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16394, -104.09513	Yes

ES-Base19-14

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	1.1 ppm	65 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16394, -104.09530	Yes

ES-Base19-15

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	0.9 ppm	63 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16395, -104.09529	Yes

Daily Site Visit Report

ES-Base19-16

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.4 ppm	60 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16398, -104.09511	Yes

ES-Base19-17

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	1.5 ppm	50 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16393, -104.09529	Yes

ES-Base19-18

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.4 ppm	50 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16396, -104.09509	Yes

ES-Base19-19

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
3 ft.	0.5 ppm	88 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16390, -104.09518	Yes

Daily Site Visit Report

ES-Base19-20

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.3 ppm	58 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16389, -104.09507	Yes

ES-Base19-21

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.4 ppm	38 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16395, -104.09510	Yes

ES-Base19-22

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
0.5 ft.	0.3 ppm	66 ppm	Low (30-600 ppm)	600 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16383, -104.09492	Yes

Daily Site Visit Report

Site Photos

Viewing Direction: Northeast

Excavated area

Viewing Direction: East

Excavated area

Viewing Direction: North

Excavated area

Viewing Direction: Northeast

Excavated area

Daily Site Visit Report

Depth Sample Photos

Sample Point ID: ES-Base19-06

Depth: 0.5 ft.

Sample Point ID: ES-Base19-07

Depth: 0.5 ft.

Sample Point ID: ES-Base19-08

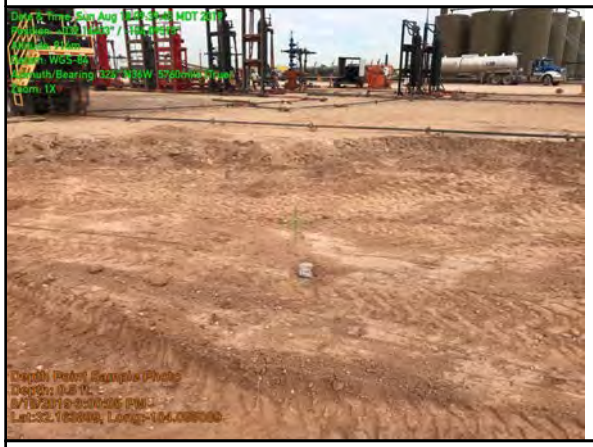
Depth: 0.5 ft.

Sample Point ID: ES-Base19-09

Depth: 0.5 ft.

Daily Site Visit Report

Sample Point ID: ES-Base19-10



Depth: 0.5 ft.

Sample Point ID: ES-Base19-11

Depth: 1 ft.

Sample Point ID: ES-Base19-12

Depth: 1 ft.

Sample Point ID: ES-Base19-13

Depth: 1 ft.

Daily Site Visit Report

Sample Point ID: ES-Base19-14

Depth: 1 ft.

Sample Point ID: ES-Base19-15

Depth: 1 ft.

Sample Point ID: ES-Base19-16

Depth: 0.5 ft.

Sample Point ID: ES-Base19-17

Depth: 1 ft.

Daily Site Visit Report

Sample Point ID: ES-Base19-18

Depth: 0.5 ft.

Sample Point ID: ES-Base19-19

Depth: 3 ft.

Sample Point ID: ES-Base19-20

Depth: 0.5 ft.

Sample Point ID: ES-Base19-21

Depth: 0.5 ft.

Daily Site Visit Report

Sample Point ID: ES-Base19-22

Depth: 0.5 ft.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Austin Harris

Signature: 
Signature

Daily Site Visit Report

Client:	Marathon Oil Permian LLC	Inspection Date:	8/19/2019
Site Location Name:	Rick Decard State 25-28-4 WA #2H	Report Run Date:	8/20/2019 12:51 AM
Project Owner:	Isaac Castro	File (Project) #:	19E-00614
Project Manager:	Dennis Williams	API #:	30-015-45344
Client Contact Name:	Isaac Castro	Reference	AST Tank Spill
Client Contact Phone #:	(575) 988-0561		

Summary of Times

Left Office	8/19/2019 11:15 AM
Arrived at Site	8/19/2019 11:38 AM
Departed Site	8/19/2019 1:07 PM
Returned to Office	8/19/2019 1:49 PM

Summary of Daily Operations

11:43 Arrive on site.
Complete safety paperwork.
Obtain confirmatory samples.
Complete DFR.
Return to office.

Next Steps & Recommendations

1

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Austin Harris

Signature: 

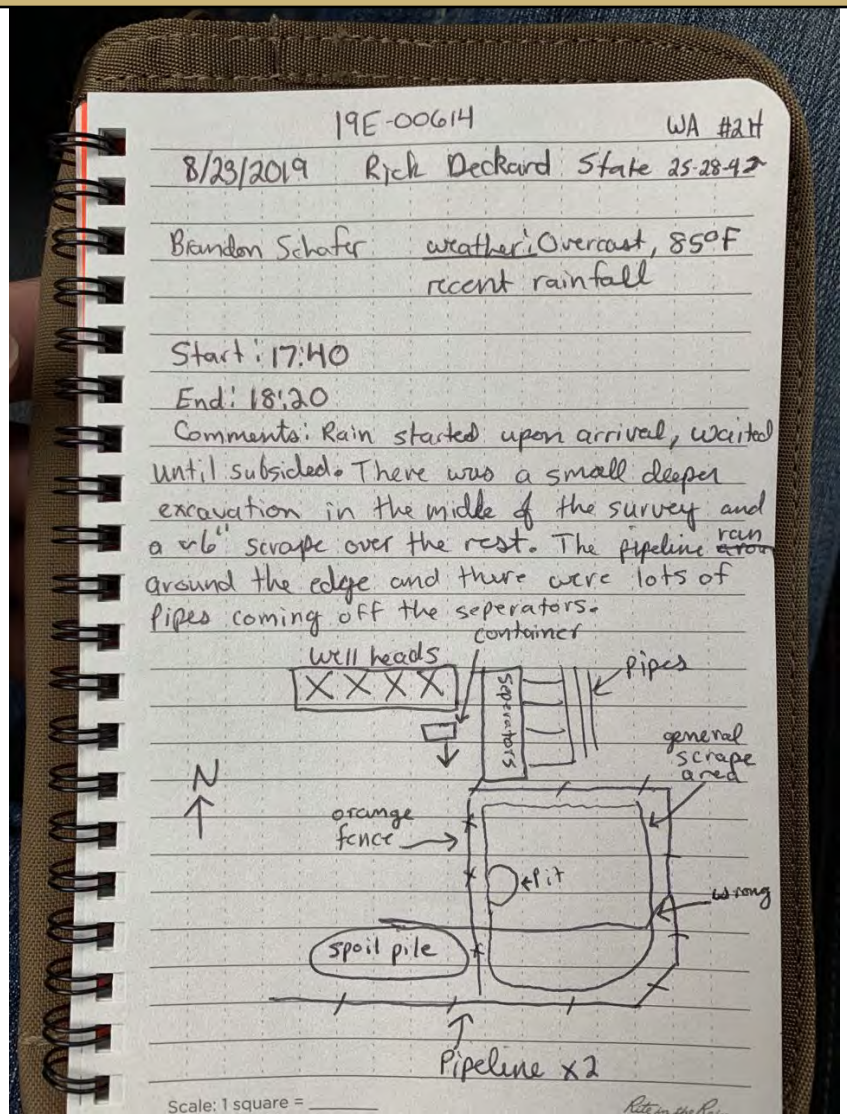
Daily Site Visit Report

Client:	Marathon Oil Permian LLC	Inspection Date:	8/23/2019
Site Location Name:	Rick Decard State 25-28-4 WA #2H	Report Run Date:	8/26/2019 3:09 PM
Project Owner:	Isaac Castro	File (Project) #:	19E-00614
Project Manager:	Dennis Williams	API #:	30-015-45344
Client Contact Name:	Isaac Castro	Reference	AST Tank
Client Contact Phone #:	(575) 988-0561		

Summary of Times	
Left Office	8/23/2019 4:15 PM
Arrived at Site	8/23/2019 4:50 PM
Departed Site	8/23/2019 6:30 PM
Returned to Office	8/23/2019 7:15 PM

Daily Site Visit Report

Site Sketch



Daily Site Visit Report

Summary of Daily Operations

17:16 EM Survey

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: Northeast

Overview of survey area

Viewing Direction: East

Overview of area

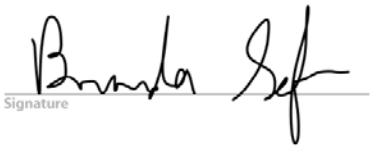
Viewing Direction: Southeast

Overview of survey area

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Brandon Schafer

Signature: 

Daily Site Visit Report

Client:	Marathon Oil Permian LLC	Inspection Date:	8/24/2019
Site Location Name:	Rick Decard State 25-28-4 WA #2H	Report Run Date:	8/24/2019 10:32 PM
Project Owner:	Isaac Castro	File (Project) #:	19E-00614
Project Manager:	Dennis Williams	API #:	30-015-45344
Client Contact Name:	Isaac Castro	Reference	AST Tank
Client Contact Phone #:	(575) 988-0561		

Summary of Times

Left Office	8/24/2019 7:30 AM
Arrived at Site	8/24/2019 8:22 AM
Departed Site	8/24/2019 2:35 PM
Returned to Office	8/24/2019 3:21 PM

Summary of Daily Operations

8:25 Arrive on site.
Complete safety paperwork.
Field screen and I btain confirmatory samples.
Complete DFR.
Return to office.

Next Steps & Recommendations

1 Send samples to lab and confirm criterias are met

2 Schedule backfill and contaminant haul out

Sampling

Daily Site Visit Report

ES-Base19-02

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	0 ppm	0 ppm	Low (30-600 ppm)	32 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16480, -104.09495	Yes

ES-Base19-12

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1.5 ft.	0 ppm	0 ppm	Low (30-600 ppm)	172 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16405, -104.09518	Yes

ES-Base19-14

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1.5 ft.	0 ppm	0 ppm	Low (30-600 ppm)	219 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16397, -104.09521	Yes

ES-Base19-15

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1.5 ft.	0 ppm	0 ppm	Low (30-600 ppm)	393 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16396, -104.09521	Yes

Daily Site Visit Report

ES-Base19-16

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	0 ppm	0 ppm	Low (30-600 ppm)	0.1 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16397, -104.09514	Yes

ES-Base19-17

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
2 ft.	0 ppm	0 ppm	Low (30-600 ppm)	88 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16396, -104.09519	Yes

ES-Base19-18

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	0 ppm	0 ppm	Low (30-600 ppm)	219 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16398, -104.09509	Yes

ES-Base19-19

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
3.5 ft.	0 ppm	0 ppm	Low (30-600 ppm)	295 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	✓	32.16396, -104.09518	Yes

Daily Site Visit Report

ES-Base19-20

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	0 ppm	0 ppm	Low (30-600 ppm)	317 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		32.16389, -104.09517	Yes

ES-Base19-21

Depth ft	VOC PID	Petro Flag TPH ppm	Quantab Range ppm	Quantab Reading ppm	Lab Analysis	Picture	Trimble Location	Marked On Site Sketch?
1 ft.	0 ppm	0 ppm	Low (30-600 ppm)	38 ppm	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		32.16391, -104.09508	Yes

Daily Site Visit Report

Site Photos

Viewing Direction: East

Excavated area

Viewing Direction: Southeast

Excavated area

Viewing Direction: North

Excavated area

Viewing Direction: West

Contaminant pile

Daily Site Visit Report

Viewing Direction: Southwest	**Viewing Direction**: South
	
Contaminant pile	Contaminant pile
Viewing Direction: Southeast	**Viewing Direction**: East
	
Contaminant pile	Contaminant pile

Daily Site Visit Report

Depth Sample Photos

Sample Point ID: ES-Base19-02

Depth: 1 ft.

Sample Point ID: ES-Base19-12

Depth: 1.5 ft.

Sample Point ID: ES-Base19-14

Depth: 1.5 ft.

Sample Point ID: ES-Base19-15

Depth: 1.5 ft.

Daily Site Visit Report

Sample Point ID: ES-Base19-16

Depth: 1 ft.

Sample Point ID: ES-Base19-17

Depth: 2 ft.

Sample Point ID: ES-Base19-18

Depth: 1 ft.

Sample Point ID: ES-Base19-19

Depth: 3.5 ft.

Daily Site Visit Report

Sample Point ID: ES-Base19-20	**Sample Point ID**: ES-Base19-21
	
Depth: 1 ft.	**Depth:** 1 ft.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Austin Harris

Signature: 
Signature

Daily Site Visit Report

Client:	Marathon Oil Permian LLC	Inspection Date:	9/5/2019
Site Location Name:	Rick Decard State 25-28-4 WA #2H	Report Run Date:	9/8/2019 2:43 AM
Project Owner:	Isaac Castro	File (Project) #:	19E-00614
Project Manager:	Dennis Williams	API #:	30-015-45344
Client Contact Name:	Isaac Castro	Reference	2019 Spill Projects
Client Contact Phone #:	(575) 988-0561		

Summary of Times

Left Office	9/5/2019 6:57 AM
Arrived at Site	9/5/2019 7:20 AM
Departed Site	9/5/2019 8:29 PM
Returned to Office	9/5/2019 9:10 PM

Summary of Daily Operations

7:33 Load and haul contaminated soil offsite.

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

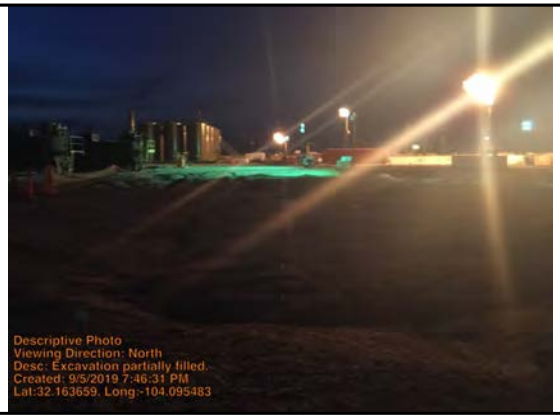
Viewing Direction: North

Excavation before any backfill.

Viewing Direction: North

Excavated contaminated soil pile - Midday.

Viewing Direction: North



Excavation partially filled.

Viewing Direction: North

Remaining soil pile.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Sharlene Harvester

Signature: 

Daily Site Visit Report

Client:	Marathon Oil Permian LLC	Inspection Date:	9/6/2019
Site Location Name:	Rick Decard State 25-28-4 WA #2H	Report Run Date:	10/7/2019 2:19 PM
Project Owner:	Isaac Castro	File (Project) #:	19E-00614
Project Manager:	Dennis Williams	API #:	30-015-45344
Client Contact Name:	Isaac Castro	Reference	2019 Spill Projects
Client Contact Phone #:	(575) 988-0561		

Summary of Times

Left Office	9/6/2019 9:15 AM
Arrived at Site	9/6/2019 9:30 AM
Departed Site	9/6/2019 7:00 PM
Returned to Office	9/6/2019 7:45 PM

Summary of Daily Operations

9:54 Load and haul out contaminated soil; load in and spread clean fill.

Next Steps & Recommendations

1

Daily Site Visit Report

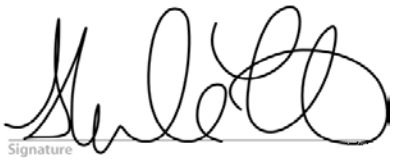
Site Photos

Viewing Direction: South	**Viewing Direction**: North
	
Excavation- partially filled.	Remaining soil pile

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Sharlene Harvester

Signature: 

ATTACHMENT 4

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q q q 64 16 4	Sec	Tws	Rng	X	Y	Distance
C 01411	C	STK	3	JIMMIE COOKSEY	ED	C 01411				Shallow	4 4 2	04	25S	28E	586289	3558522*	1124
C 02668	C	STK	0	G A GUNN	ED	C 02668					2 1 2	09	25S	28E	585890	3557525*	1603
C 02690	C	STK	0	EVELYN COOKSEY	ED	C 02690					2 3	05	25S	28E	583745	3558219*	1719
C 03989	CUB	EXP	0	RUSTLER HILLS II LTD	ED	C 03989 POD1			NON	Shallow	4 2 2	33	24S	28E	586341	3560573	1896
C 03988	CUB	EXP	0	RUSTLER HILLS II LTD	ED	C 03988 POD1	NA		NON	Shallow	4 4 4	28	24S	28E	586303	3561087	2322
C 04025	CUB	EXP	0	SCOTT BRANSON	ED	C 04025 POD1				Shallow	4 3 3	27	24S	28E	586699	3560964	2422
C 04073	C	PRO	0	MESQUITE SWD INC	ED	C 04025 POD1				Shallow	4 3 3	27	24S	28E	586699	3560964	2422
C 04074	C	PRO	0	MESQUITE SWD INC	ED	C 04025 POD1				Shallow	4 3 3	27	24S	28E	586699	3560964	2422
C 04075	C	PRO	0	MESQUITE SWD INC	ED	C 04025 POD1				Shallow	4 3 3	27	24S	28E	586699	3560964	2422
C 04222	CUB	EXP	0	VL FRESH WATER LLC	ED	C 04222 POD1	NA			Shallow	1 3 3	27	24S	28E	586406	3561228	2494
C 01433	C	PUB	0	NM STATE HWY DEPT.	ED	C 01433					3 4	10	25S	28E	587436	3556238*	3511
C 00423	C	STK	3	C. P. PARDUE & SONS	ED	C 00423				Shallow	4 1 4	30	24S	28E	582611	3561363*	3556
C 03669	C	SAN	0	CRESTWOOD NEW MEXICO PIPELINES	ED	C 03669					1 2 2	29	24S	28E	584389	3562486	3591
					ED	C 03669 POD1					1 2 2	29	24S	28E	584389	3562486	3591
C 03263	CUB	PLS	3	CLARAMAI R HAYHURST	ED	C 03263 POD1					1 1 1	07	25S	28E	581628	3557501*	3944
C 01264	CUB	EXP	0	GUY A. REED	ED	C 03358 POD1				Shallow	1 4 1	26	24S	28E	588416	3562116	4420
C 03358	C	STK	3	VALERIE BRANSON	ED	C 03358 POD1				Shallow	1 4 1	26	24S	28E	588416	3562116	4420
C 03359	C	PRO	0	CORKY GLENN	ED	C 03358 POD1				Shallow	1 4 1	26	24S	28E	588416	3562116	4420

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

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q 640	q 160	q 40	Sec	Tws	Rng	X	Y	Distance
C 03376	C	PRO	0	RIO TANKS FASLINE INC	ED	C 03358 POD1				Shallow	1	4	1	26	24S	28E	588416	3562116	4420
C 03391	C	PRO	0	RIO TANKS FASLINE INC.	ED	C 03358 POD1				Shallow	1	4	1	26	24S	28E	588416	3562116	4420
C 03485	C	PRO	0	SCOTT BRANSON	ED	C 03358 POD1				Shallow	1	4	1	26	24S	28E	588416	3562116	4420
C 03486	C	PRO	0	SCOTT BRANSON	ED	C 03358 POD1				Shallow	1	4	1	26	24S	28E	588416	3562116	4420
C 03487	C	PRO	0	SCOTT BRANSON	ED	C 03358 POD1				Shallow	1	4	1	26	24S	28E	588416	3562116	4420
C 03742	C	PRO	0	CONCHO OIL & GAS	ED	C 03358 POD1				Shallow	1	4	1	26	24S	28E	588416	3562116	4420
C 03743	C	PRO	0	CONCHO OIL & GAS	ED	C 03358 POD1				Shallow	1	4	1	26	24S	28E	588416	3562116	4420
C 03744	C	PRO	0	CONCHO OIL & GAS	ED	C 03358 POD1				Shallow	1	4	1	26	24S	28E	588416	3562116	4420
C 04181	CUB	EXP	0	SCOTT BRANSON	ED	C 04181 POD1	NA			Shallow	3	2	1	26	24S	28E	588450	3562146	4466
					ED	C 04181 POD2				Shallow	3	2	1	26	24S	28E	588393	3562212	4473
C 01265	CUB	EXP	0	GUY A. REED	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03158	C	PRO	0	NEARBURG PRODUCTING	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03250	C	PRO	0	PATTERSON DRILLING COMPANY	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03315	C	PRO	0	CORKY GLENN	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03423	C	STK	3	SCOTT BRANSON	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03425	C	PRO	0	BOBCO PRODUCTION CO	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03466	C	PRO	0	O.G.X. RESOURCES	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03473	C	PRO	0	SCOTT BRANSON	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03474	C	PRO	0	SCOTT BRANSON	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03475	C	PRO	0	SCOTT BRANSON	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03683	C	PRO	0	SCOTT BRANSON	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584
C 03685	C	PRO	0	SCOTT BRANSON	ED	C 03423				Shallow	2	4	1	26	24S	28E	588786	3561952	4584

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

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

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code Grant	Source	q 64	q 16	q 4	Sec	Tws	Rng	X	Y	Distance
C 04151	CUB	EXP	0	VL FRESH WATER LLC	ED	C 04151 POD1	NA		Shallow	4	2	1	26	24S	28E	588584	3562192	4594
C 00394	CUB	CLS	0	DEKALB AGRIGULTURAL ASSN.	ED	C 00394		C			4	2	21	24S	28E	586116	3563545*	4616
C 04294	CUB	MON	0	EMERGENCY ENVIROMENTAL SERV	ED	C 04294 POD1	NA			4	3	3	23	24S	28E	588169	3562646	4651
C 04222	CUB	EXP	0	VL FRESH WATER LLC	ED	C 04222 POD2	NA		Shallow	1	2	4	22	24S	28E	587707	3563255	4897

Record Count: 44

UTMNAD83 Radius Search (in meters):

Easting (X): 585274.28 **Northing (Y):** 3559005.64 **Radius:** 5000

Sorted by: Distance

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

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

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 01411	C	ED	4	4	2	04	25S	28E	586289	3558522*	1124	69	35	34
C 02668	C	ED	2	1	2	09	25S	28E	585890	3557525*	1603	150		
C 03989 POD1	CUB	ED	4	2	2	33	24S	28E	586342	3560573	1896	100	70	30
C 03988 POD1	CUB	ED	4	4	4	28	24S	28E	586303	3561087	2322	110	95	15
C 04025 POD1	CUB	ED	4	3	3	27	24S	28E	586700	3560964	2422	190	90	100
C 04222 POD1	CUB	ED	1	3	3	27	24S	28E	586406	3561228	2494	140	35	105
C 03263 POD1	CUB	ED	1	1	1	07	25S	28E	581628	3557501*	3944	133		
C 03358 POD1	CUB	ED	1	4	1	26	24S	28E	588416	3562116	4420	135		
C 04181 POD1	CUB	ED	3	2	1	26	24S	28E	588450	3562146	4466	280	56	224
C 04181 POD2	C	ED	3	2	1	26	24S	28E	588393	3562212	4473	80	56	24
C 03423	CUB	ED	2	4	1	26	24S	28E	588786	3561952	4584	126		
C 04151 POD1	CUB	ED	4	2	1	26	24S	28E	588584	3562192	4594	280	65	215
C 04294 POD1	CUB	ED	4	3	3	23	24S	28E	588169	3562646	4651	60		
C 04222 POD2	CUB	ED	1	2	4	22	24S	28E	587707	3563255	4897	100	40	60

Average Depth to Water: **60 feet**

Minimum Depth: **35 feet**

Maximum Depth: **95 feet**

Record Count: 14

UTMNAD83 Radius Search (in meters):

Easting (X): 585274.28 **Northing (Y):** 3559005.64 **Radius:** 5000

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


Rick Deckard State 25-28-4 WA 2H
flowing watercourse 223 ft
Legend
Rick Deckard St 25 32.16430, -104.09560
Rick Deckard St 25 32.16430, -104.09560
Google Earth
© 2018 Google
N
500 ft

U.S. Fish and Wildlife Service
National Wetlands Inventory

Rick Deckard State 2H 8,381 ft Lake

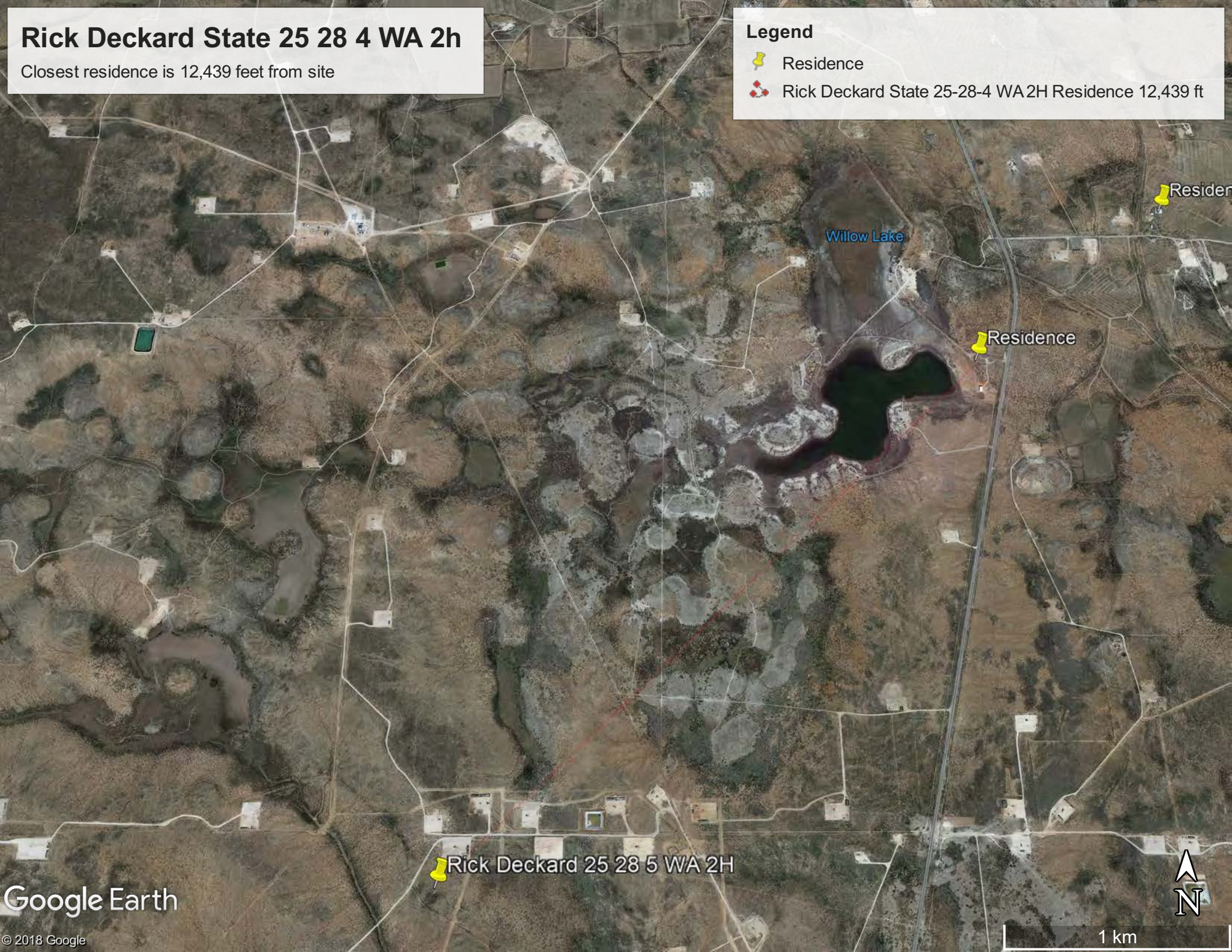
August 5, 2019

Wetlands

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

Rick Deckard State 25 28 4 WA 2h

Closest residence is 12,439 feet from site



New Mexico Office of the State Engineer
Wells with Well Log Information

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

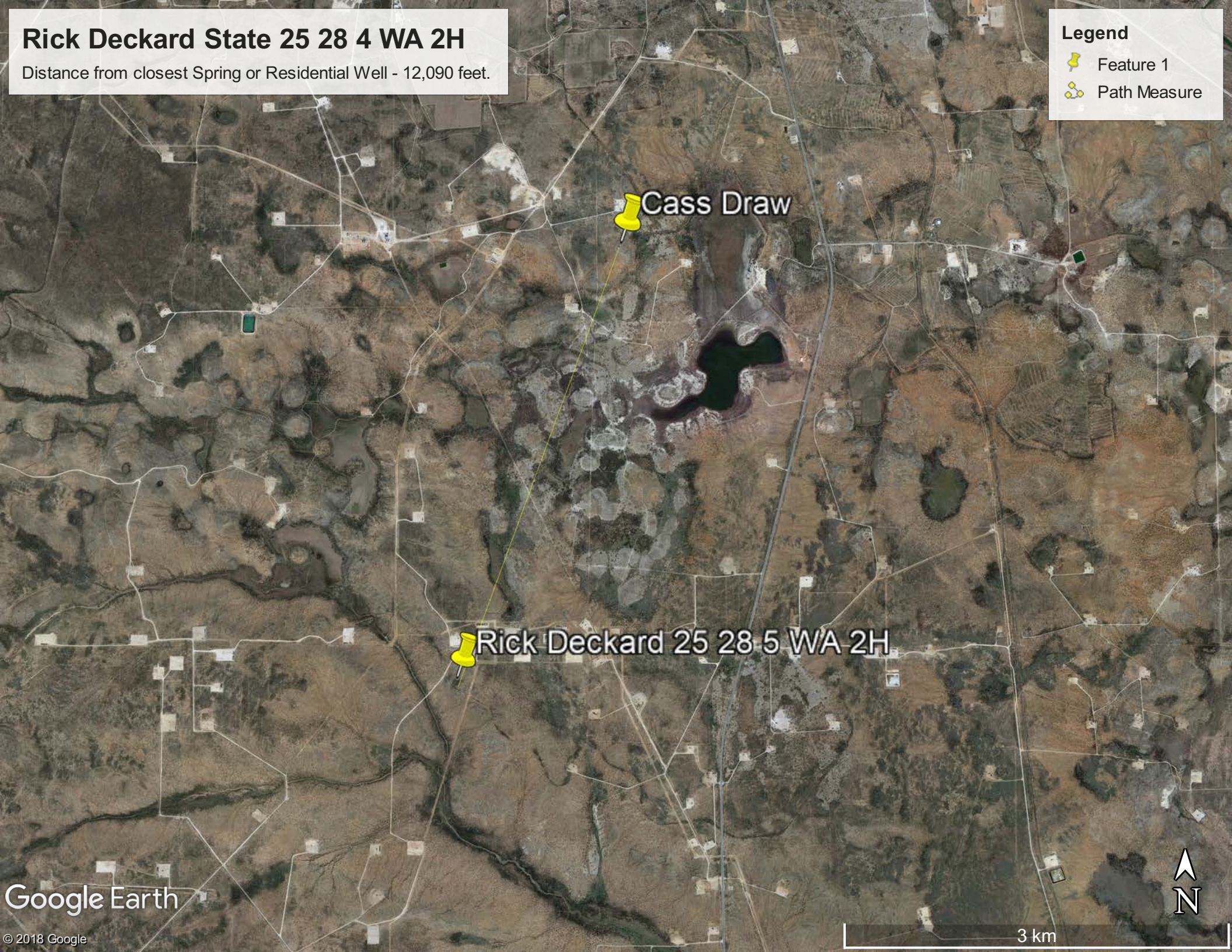
POD Number	POD Sub-basin Code	County	Source	q 6416	q 4	q 2	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
C 01411	C	ED	Shallow	4	4	2	04	25S	28E	586289	3558522*	1124	10/07/1969	10/15/1969	10/20/1969	69	35	WHITE, QUINCE L.	439
C 02668	C	ED		2	1	2	09	25S	28E	585890	3557525*	1603	11/08/1999	11/08/1999	11/23/1999	150		CONES, RICKEY	399
C 03989 POD1	CUB	ED	Shallow	4	2	2	33	24S	28E	586342	3560573	1896	01/12/2017	01/13/2017	01/16/2017	100	70	MALEY, JASON	1690
C 03988 POD1	CUB	ED	Shallow	4	4	4	28	24S	28E	586303	3561087	2322	12/05/2016	12/20/2016	12/20/2016	110	95	MALEY, JASON	1690
C 04025 POD1	CUB	ED	Shallow	4	3	3	27	24S	28E	586700	3560964	2422	04/25/2017	04/26/2017	05/16/2017	190	90	STEWART, JOEL H.	331
C 04222 POD1	CUB	ED	Shallow	1	3	3	27	24S	28E	586406	3561228	2494	05/27/2018	05/28/2018	07/05/2018	140	35	BRYCE WALLACE	1706
C 00423	C	ED	Shallow	4	1	4	30	24S	28E	582611	3561363*	3556			05/29/1953			HOWARD HEMLER	
C 03358 POD1	CUB	ED	Shallow	1	4	1	26	24S	28E	588416	3562116	4420	04/01/2014	04/06/2014	04/11/2014	135		RICHARD CARTER	1229
C 04181 POD1	CUB	ED	Shallow	3	2	1	26	24S	28E	588450	3562146	4466	01/10/2018	01/12/2018	01/31/2018	280	56	WALLACE, BRYCE J.	1706
C 04181 POD2	C	ED	Shallow	3	2	1	26	24S	28E	588393	3562212	4473	05/30/2018	06/01/2018	08/15/2018	80	56	WALLACE, BRYCE J.	1706
C 03423	CUB	ED	Shallow	2	4	1	26	24S	28E	588786	3561952	4584		12/06/1965	12/07/1965	126		A.M. BRININSTOOL	410
C 04151 POD1	CUB	ED	Shallow	4	2	1	26	24S	28E	588584	3562192	4594	01/03/2018	01/06/2018	01/31/2018	280	65	WALLACE, BRYCE J.	1706
C 04294 POD1	CUB	ED		4	3	3	23	24S	28E	588169	3562646	4651	12/07/2018	12/08/2018	12/20/2018	60		MANN, TRAVIS	1778
C 04222 POD2	CUB	ED	Shallow	1	2	4	22	24S	28E	587707	3563255	4897	05/29/2018	05/30/2018	07/05/2018	100	40	BRYCE WALLACE	1706

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

Record Count: 14

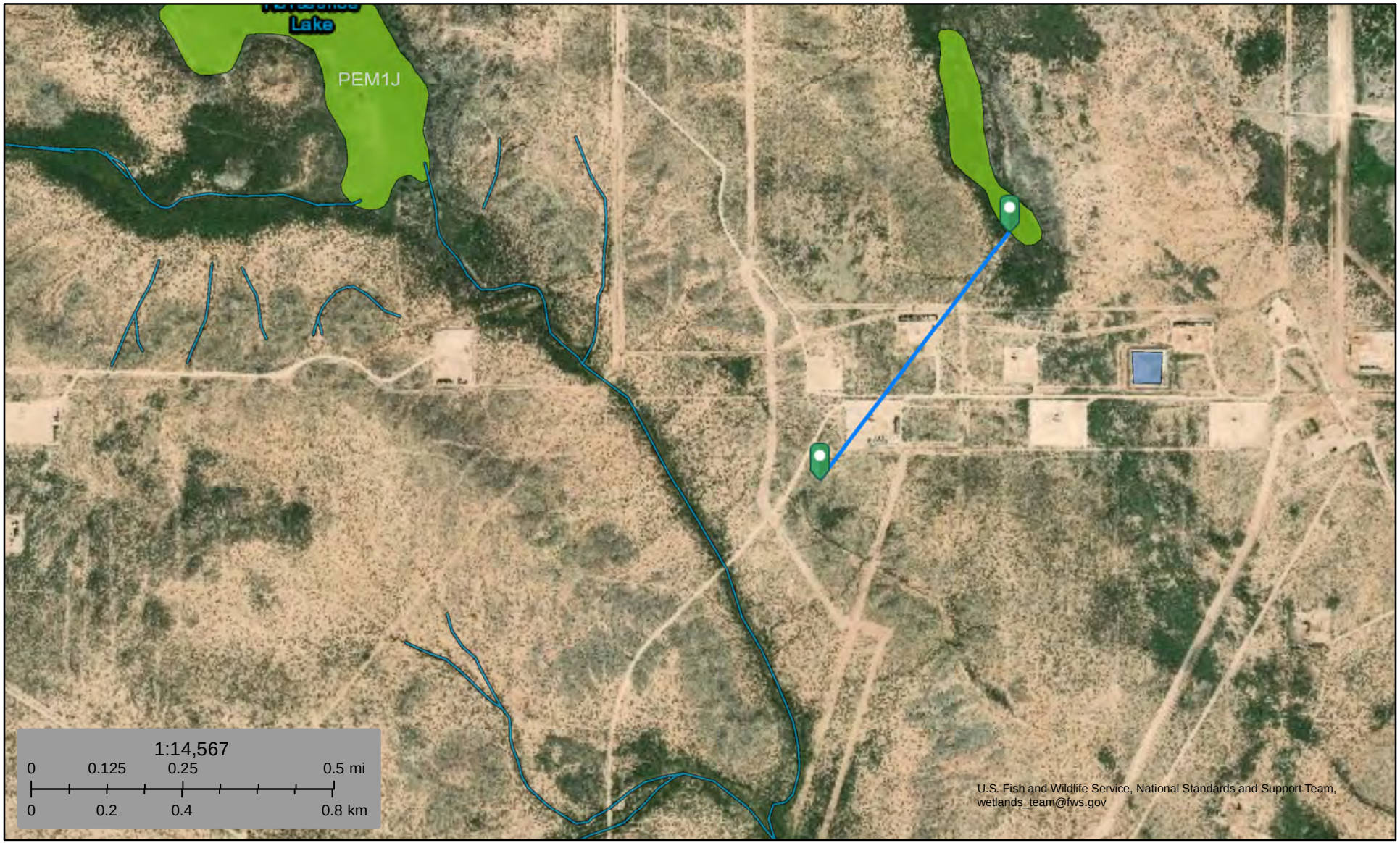
UTMNAD83 Radius Search (in meters):

Easting (X): 585274.28 **Northing (Y):** 3559005.64 **Radius:** 5000


Rick Deckard State 25 28 4 WA 2H
Distance from closest Spring or Residential Well - 12,090 feet.
Legend
Feature 1
Path Measure
Cass Draw
Rick Deckard 25 28 5 WA 2H
Google Earth
© 2018 Google
N
3 km

U.S. Fish and Wildlife Service
National Wetlands Inventory

Rick Deckard State 2H 2,300 ft Wetland



August 5, 2019

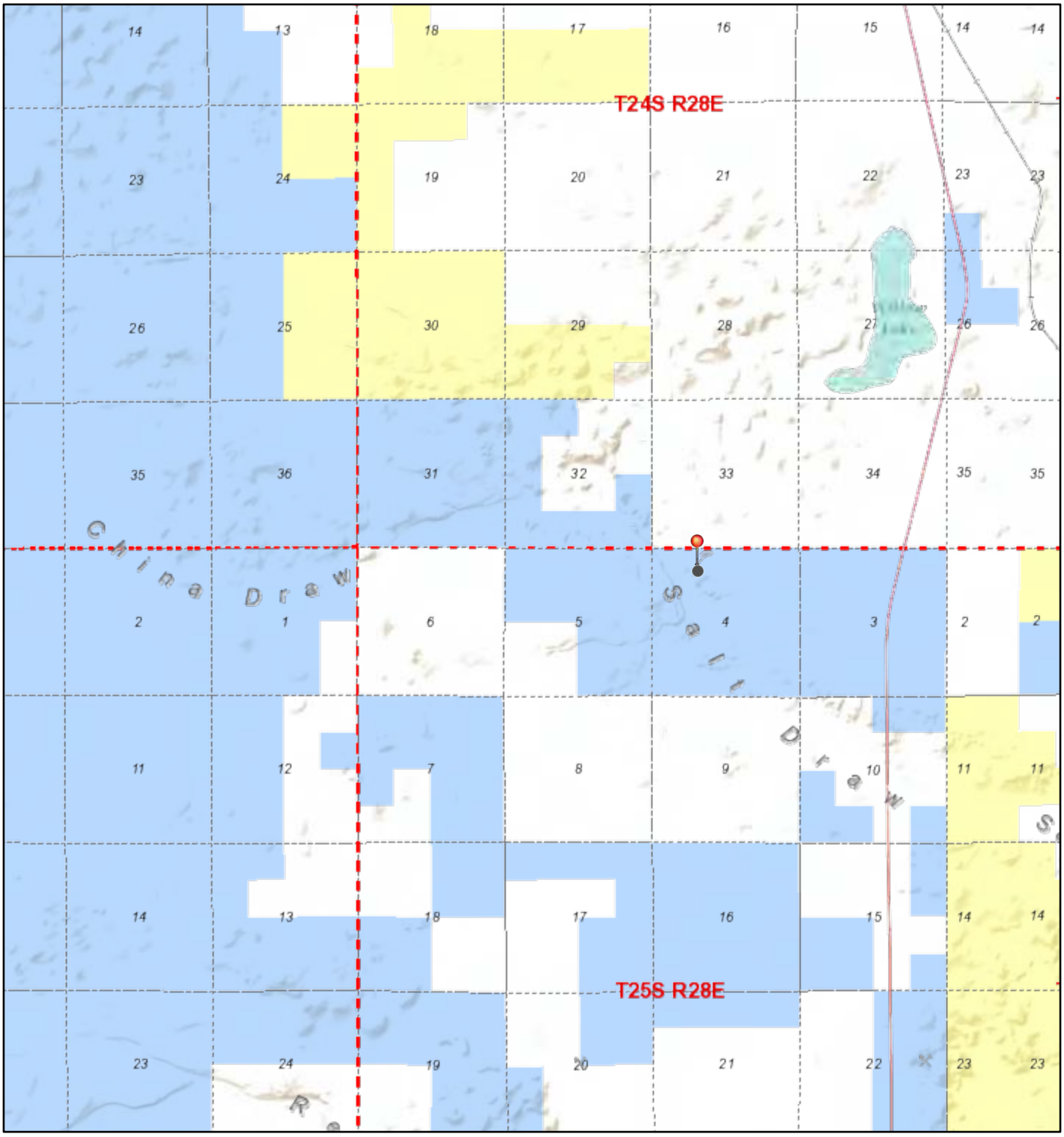
Wetlands

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

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Active Mines in New Mexico



8/12/2019 12:33:34 PM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

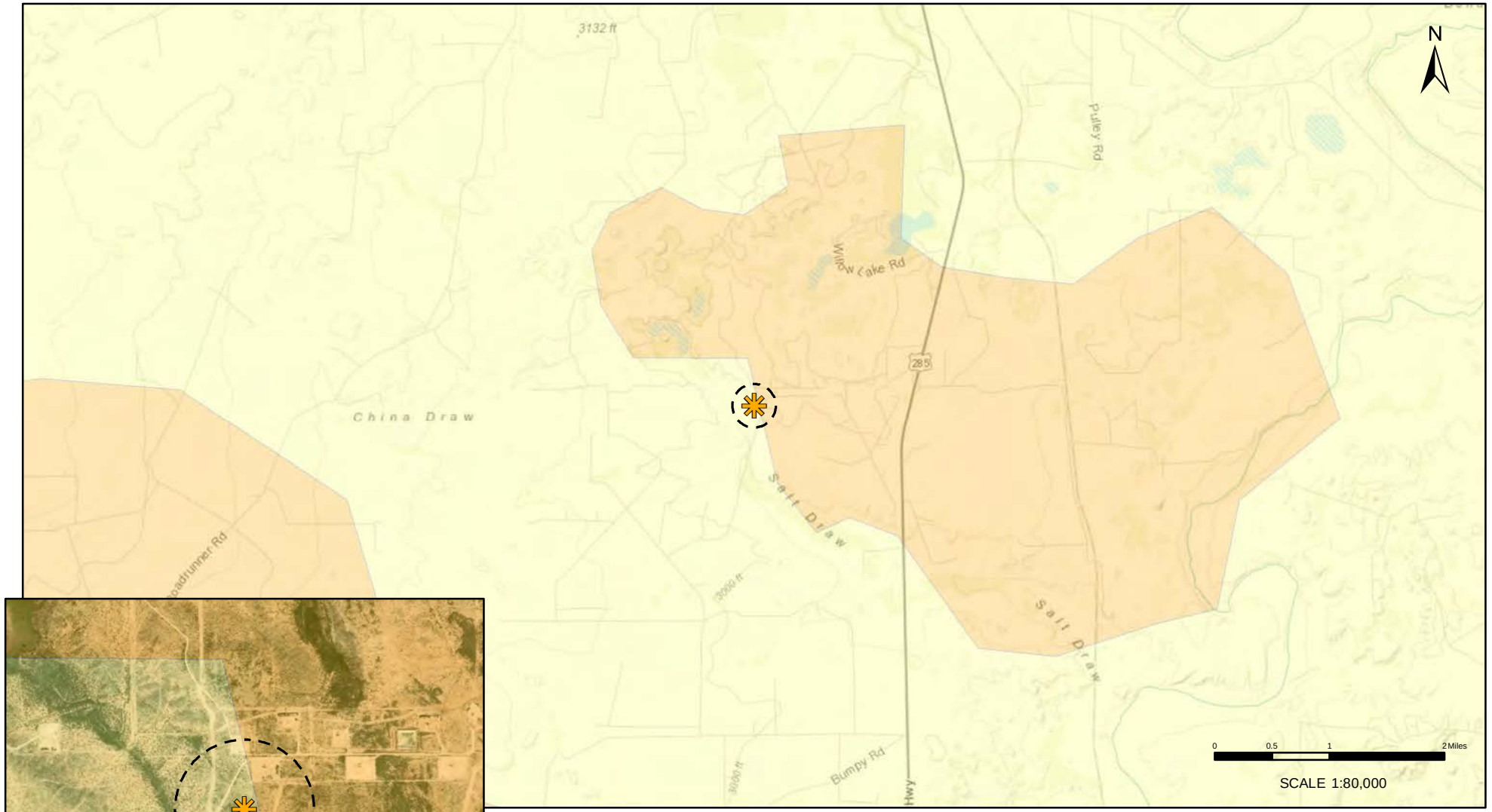
Registered Mines

- Aggregate, Stone etc.
- Aggregate, Stone etc.

U.S. Bureau of Land Management - New Mexico State Office, Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

EMNRD MMD GIS Coordinator

NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)



LEGEND

- SITE
- 1000FT BUFFER

KARST POTENTIAL

- CRITICAL
- HIGH
- MEDIUM
- LOW

Notes: Aerial Image from ESRI Digital Globe 2018

Marathon Oil

Karst Potential
Rick Deckard State
25-28-4 WA 2H

VERTEX

DRAWN:	NM
APPROVED:	SH
DATE:	AUG 06/19

FIGURE: **1**

VERSATILITY. EXPERTISE.

National Flood Hazard Layer FIRMette

FEMA

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- **SPECIAL FLOOD HAZARD AREAS**
  - Without Base Flood Elevation (BFE) *Zone A, V, A99*
  - With BFE or Depth *Zone AE, AO, AH, VE, AR*
  - Regulatory Floodway
- **OTHER AREAS OF FLOOD HAZARD**
  - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
  - Future Conditions 1% Annual Chance Flood Hazard *Zone X*
  - Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
  - Area with Flood Risk due to Levee *Zone D*
- **OTHER AREAS**
  - NO SCREEN Area of Minimal Flood Hazard *Zone X*
  - Effective LOMRs
  - Area of Undetermined Flood Hazard *Zone D*
- **GENERAL STRUCTURES**
  - Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- **OTHER FEATURES**
  - 20.2 Cross Sections with 1% Annual Chance
  - 17.5 Water Surface Elevation
  - Coastal Transect
  - Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- **MAP PANELS**
  - Digital Data Available
  - No Digital Data Available
  - Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/5/2019 at 2:54:07 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eddy Area, New Mexico

August 5, 2019

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

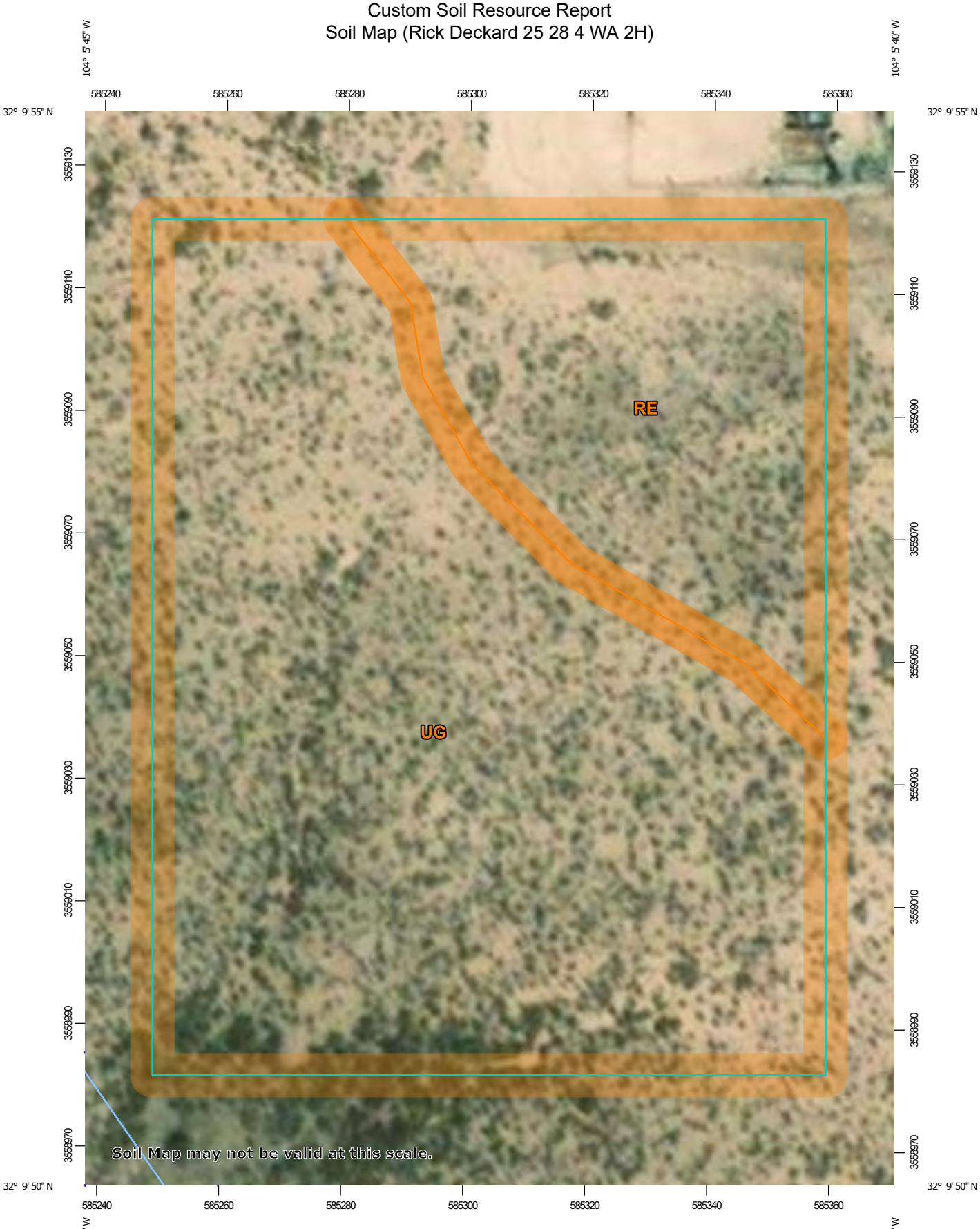
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



Map Scale: 1:855 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 10 20 40 60

Feet
0 40 80 160 240

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

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 14, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jun 10, 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 (Rick Deckard 25 28 4 WA 2H)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RE	Reagan-Upton association, 0 to 9 percent slopes	1.0	26.2%
UG	Upton gravelly loam, 0 to 9 percent slopes	2.8	73.8%
Totals for Area of Interest		**3.8**	**100.0%**

Map Unit Descriptions (Rick Deckard 25 28 4 WA 2H)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Eddy Area, New Mexico

RE—Reagan-Upton association, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: 1w5d
Elevation: 1,100 to 5,400 feet
Mean annual precipitation: 6 to 14 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 180 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Reagan and similar soils: 70 percent
Upton and similar soils: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan

Setting

Landform: Alluvial fans, fan remnants
Landform position (three-dimensional): Rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 60 inches: loam

Properties and qualities

Slope: 0 to 3 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: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: Loamy (R070DY153NM)
Hydric soil rating: No

Description of Upton

Setting

Landform: Ridges, fans
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from limestone

Typical profile

H1 - 0 to 9 inches: gravelly loam
H2 - 9 to 13 inches: gravelly loam
H3 - 13 to 21 inches: cemented
H4 - 21 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 75 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: Shallow Loamy (R070DY159NM)
Hydric soil rating: No

Minor Components

Pima

Percent of map unit:
Ecological site: Bottomland (R042XC017NM)
Hydric soil rating: No

Atoka

Percent of map unit:
Ecological site: Loamy (R042XC007NM)
Hydric soil rating: No

UG—Upton gravelly loam, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: 1w64
Elevation: 1,100 to 4,400 feet
Mean annual precipitation: 7 to 15 inches
Mean annual air temperature: 60 to 70 degrees F
Frost-free period: 200 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Upton and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Upton

Setting

Landform: Ridges, fans
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from limestone

Typical profile

H1 - 0 to 9 inches: gravelly loam
H2 - 9 to 13 inches: gravelly loam
H3 - 13 to 21 inches: cemented
H4 - 21 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 75 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D

Ecological site: Shallow (R042XC025NM)
Hydric soil rating: No

Minor Components

Reagan

Percent of map unit:
Ecological site: Loamy (R042XC007NM)
Hydric soil rating: No

Atoka

Percent of map unit:
Ecological site: Loamy (R042XC007NM)
Hydric soil rating: No

Upton

Percent of map unit:
Ecological site: Shallow (R042XC025NM)
Hydric soil rating: No

Atoka

Percent of map unit:
Ecological site: Loamy (R042XC007NM)
Hydric soil rating: No

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ATTACHMENT 5

Rick Deckard 25-28-4 WA #2H Load Tracking									
9/5/2019		9/6/2019		/ /		/ /		/ /	
Waste Manifest #	Yards	Waste Manifest #	Yards	Waste Manifest #	Yards	Waste Manifest #	Yards	Waste Manifest #	Yards
170988	20	170987	20						
170957	20	171026	12						
170958	20	171027	20						
170959	20	171028	12						
170960	20	171029	12						
170961	20	171030	12						
170962	20	171031	12						
170963	20								
170964	20								
170965	20								
170966	20								
170967	20								
170968	20								
170969	20								
170970	20								
170971	20								
170972	20								
170973	20								
170974	20								
170975	20								
170976	20								
170977	20								
170978	20								
170979	20								
170980	20								
170981	20								
170982	20								
170983	20								
170984	20								
170985	20								
170986	20								

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name
Phone No.

GENERATOR

NO. 171030

Operator No.
Operators Name: Marathon Oil
Address: 411 S. Tuttle Road
City, State, Zip: Carlsbad NM 88220
Phone No.: 575 323 9411

Permit/RRC No.
Lease/Well Name & No.: Rick Deckard 25 284 NA 1H 2H 5H 6H
County: Eddy
API No.: 30-015-45344
Rig Name & No.
AFE/PO No.: TA.19.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	10 Bbl	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

ISAAC CASTRO PER SHANE HARVESTER — (PRINT) AUTHORIZED AGENTS SIGNATURE
07-6-19 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name
Address: BDS
Phone No.

Driver's Name: Jorge Montoya
Print Name
Phone No.
Truck No.: 08

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE — DRIVER'S SIGNATURE — DELIVERY DATE — DRIVER'S SIGNATURE

TRUCK TIME STAMP

IN: 2:00 PM OUT:

DISPOSAL FACILITY

Site Name/ Permit No.: **Red Bluff Facility/ STF-065**
Address: **5053 US Highway 285, Orla, TX 79770**
Phone No.: **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride
Conductivity (mmhos/cm) pH

RECEIVING AREA

Name/No.

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

NO. 171029

GENERATOR

Operator No. _____
Operators Name Marathon Oil
Address 4111 S Tidwell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 323 9441

Permit/RRC No. _____
Lease/Well Name & No. Rick Deckard 25-28-4 WA 1H 2H 5H 6
County Eddy
API No. 30-015-46344
Rig Name & No. _____
AFE/PO No. 7A.12.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings	Washout Water (Non-Injectable)	
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings	Produced Water (Non-Injectable)	
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms	INTERNAL USE ONLY	
E&P Contaminated Soil 12	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Lopez Rite Shot Harvester — (PRINT) AUTHORIZED AGENTS SIGNATURE
5-10-19 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name _____
Address _____
Phone No. _____

Driver's Name Jorge Martinez
Print Name _____
Phone No. _____
Truck No. 057

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____ DELIVERY DATE _____ DRIVER'S SIGNATURE _____

TRUCK TIME STAMP IN: 1104 OUT: _____

DISPOSAL FACILITY

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH _____

RECEIVING AREA Name/No. _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

NAME (PRINT) _____ DATE _____ TITLE _____ SIGNATURE _____

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 171027

Operator No. _____
Operators Name Marathon Oil
Address 411 S. Idwell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 323 0441

Permit/RRC No. _____
Lease/Well Name & No. Rick Deck A 25-28-4 WA 1H
County Eddy
API No. 30-015-45341
Rig Name & No. _____
AFE/PO No. TA.19.02259

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)			
Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	20	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

ISAAC CASTRO PUSHER Isaac Castro 9/9/2014
(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name JSR Mexico Trucking
Address _____
Phone No. _____

Driver's Name Jesus M
Print Name _____
Phone No. _____
Truck No. 408

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____ DELIVERY DATE _____ DRIVER'S SIGNATURE _____

TRUCK TIME STAMP
IN: _____ OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____
Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

NAME (PRINT) _____ DATE _____ TITLE _____ SIGNATURE _____

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 171028

Operator No. _____
Operators Name Marathon O.I
Address 4111 S. Cowell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Pure Declared 25284 WA #1 21H 6H
County Eddy
API No. 30-015-45341
Rig Name & No. _____
AFE/PO No. TA 18.02269

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)			
Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	12	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro PSR Supv. HAZ-SER 9/6/2018 _____
(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name BDS
Address _____
Phone No. _____

Driver's Name Jorge Montiel
Print Name _____
Phone No. _____
Truck No. 62

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____ DELIVERY DATE _____ DRIVER'S SIGNATURE _____

TRUCK TIME STAMP
IN: _____ OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride _____
Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

_____ 9/6/18 _____ _____
NAME (PRINT) DATE TITLE SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170987

Operator No. _____
Operators Name Murchison Oil
Address 4111 S Cavern Well Road
City, State, Zip Carlsbad NM 88220
Phone No. 575-393-9441

Permit/RRC No. _____
Lease/Well Name & No. Pickett 25 28 4 WA #1 HILLS, CA
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. IA 19-02264

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)		
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)		
Water Based Cuttings		Produced Water (Non-Injectable)		
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)		
Tank Bottoms		INTERNAL USE ONLY		
E&P Contaminated Soil	20	Truck Washout (exempt waste)		
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Carrasco for Stout Harvesting — (PRINT) AUTHORIZED AGENTS SIGNATURE
2/6/2019 — DATE
[signature] — SIGNATURE

TRANSPORTER

Transporter's Name [illegible]
Address _____
Phone No. _____

Driver's Name [illegible]
Print Name _____
Phone No. _____
Truck No. 26

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____ DELIVERY DATE _____ DRIVER'S SIGNATURE _____

DISPOSAL FACILITY

TRUCK TIME STAMP
IN: 1:11 PM OUT: _____

RECEIVING AREA
Name/No. _____

Site Name/Permit No. Red Bluff Facility/ STF-065
Phone No. 432-448-4239
Address 5053 US Highway 285, Orla, TX 79770

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

[illegible] — NAME (PRINT)
1/11/19 — DATE
[illegible] — TITLE
[signature] — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170986

Operator No. _____
Operators Name Marathon O.I
Address 4111 E. 37th Street Road
City, State, Zip Carlsbad, NM 88220
Phone No. 575 393 7441

Permit/RRC No. _____
Lease/Well Name & No. Rick Deckard 25 294 WA III 2H 5H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. TA 19.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)	
Oil Based Cuttings		Washout Water (Non-Injectable)		Drill-1 Pump	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)			
Water Based Cuttings		Produced Water (Non-Injectable)			
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)			
Tank Bottoms		INTERNAL USE ONLY			
E&P Contaminated Soil	20	Truck Washout (exempt waste)			
Gas Plant Waste					

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Casas Pres Sipa Hazmat Inc — 9/5/2019 — _____

(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name Mcon Trucking LLC
Address PO Box 111 Hobbs NM 88241
Phone No. _____

Driver's Name Roberto Medina Garcia
Print Name Roberto Medina G.
Phone No. _____
Truck No. 62

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

9-5-19 — Roberto Medina G. — 9-5-19 — Roberto Medina G.

SHIPMENT DATE — DRIVER'S SIGNATURE — DELIVERY DATE — DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP
IN: 9:48 am OUT: _____

RECEIVING AREA
Name/No. TS

Site Name/Permit No. Red Bluff Facility/ STF-065
Phone No. 432-448-4239
Address 5053 US Highway 285, Orla, TX 79770

NORM READINGS TAKEN? (Circle One) YES (NO) If YES, was reading > 50 micro roentgens? (circle one) YES (NO)

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jorge Cuevas — 9-5-19 — Driver — _____

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 171026

Operator No. _____
Operators Name Marathon Oil
Address 411 S. Airport Road
City, State, Zip Guymon, OK 73942
Phone No. 580 338 9141

Permit/RRC No. _____
Lease/Well Name & No. Rick Deck A #2H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. 1A.10.022633

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil		Truck Washout (exempt waste)	
Gas Plant Waste			

Load

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☒ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Cisneros Isaac Cisneros 9/6/2016

(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name _____
Address _____
Phone No. _____

Driver's Name Jose Alonso
Print Name _____
Phone No. _____
Truck No. 58

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP IN: 12 PM OUT: _____

RECEIVING AREA Name/No. _____

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jonathan Wilson 9/6/16 Mgr Jonathan Wilson

NAME (PRINT) DATE TITLE SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170985

Operator No. _____
Operators Name Marathon Oil
Address 411 S. Church Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Rice Deland 25 24 WA 1H 2H 5H 6H
County Eddy
API No. 30-015-46244
Rig Name & No. _____
AFE/PO No. 1A.19.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)	
Oil Based Cuttings		Washout Water (Non-Injectable)		Roll N Dump	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)			
Water Based Cuttings		Produced Water (Non-Injectable)			
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)			
Tank Bottoms		INTERNAL USE ONLY			
E&P Contaminated Soil	20	Truck Washout (exempt waste)			
Gas Plant Waste					

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS 20 E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro for Silver Waste 9/5/2019
(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name J&R Transport
Address Po Box 1031
Lovington NM 88260
Phone No. _____

Driver's Name _____
Print Name _____
Phone No. _____
Truck No. #3

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

9-5-19 SHIPMENT DATE _____ DRIVER'S SIGNATURE 9-5-19 DELIVERY DATE _____ DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP IN: 8:56 OUT: _____

RECEIVING AREA Name/No. T3

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES (NO) If YES, was reading > 50 micro roentgens? (circle one) YES (NO)

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jaime Ruiz 9-5-19 Driver
NAME (PRINT) DATE TITLE SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170983

Operator No. _____
Operators Name Marathon Oil
Address 111 S 7 Duval Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Dirk Dickard 25 28 4 WA 1H 2H 5H 6H
County Eddy
API No. 30-015-45341
Rig Name & No. _____
AFE/PO No. 1A.10.02268

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Muds		Washout Water (Non-Injectable)		Belly Dump
Oil Based Cuttings		Completion Fluid/Flow back (Non-Injectable)		
Water Based Muds		Produced Water (Non-Injectable)		
Water Based Cuttings		Gathering Line Water/Waste (Non-Injectable)		
Produced Formation Solids		INTERNAL USE ONLY		
Tank Bottoms		Truck Washout (exempt waste)		
E&P Contaminated Soil	20			
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Jorge Castro Reyes Jorge Hernandez — 9/5/2019 — _____

(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name Gold Rod BDS
Address _____
Phone No. _____

Driver's Name _____
Print Name _____
Phone No. _____
Truck No. 878

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

9-5-19 — SHIPMENT DATE — DRIVER'S SIGNATURE — 9-5-19 — DELIVERY DATE — DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP
IN: 4:01 OUT: _____

RECEIVING AREA
Name/No. 13

Site Name/Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES (NO) If YES, was reading > 50 micro roentgens? (circle one) YES (NO)

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jorge Reyes — 9-5-19 — Dispatcher — _____

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170984

Operator No. _____
Operators Name Laughton Oil
Address 411 Tidwell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 885 9411

Permit/RRC No. _____
Lease/Well Name & No. Rick Deckard 25 24 S 4 WA 1H 2H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. 19.0258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)					
Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)	
Oil Based Cuttings		Washout Water (Non-Injectable)			
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)			
Water Based Cuttings		Produced Water (Non-Injectable)			
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)			
Tank Bottoms		INTERNAL USE ONLY			
E&P Contaminated Soil	20	Truck Washout (exempt waste)			
Gas Plant Waste					

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY	B - BARRELS	20 Y - YARDS	E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Cosme Ron Smith Ventures 9/9/2019
(PRINT) AUTHORIZED AGENT'S SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name J&K Transport LLC
Address _____
Phone No. _____

Driver's Name Jacobo Vazquez
Print Name _____
Phone No. _____
Truck No. 5

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

9-5-19 — SHIPMENT DATE
X Jacobo Velazquez — DRIVER'S SIGNATURE
9-5-19 — DELIVERY DATE
X Jacobo Velazquez — DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP
IN: 8:18 OUT: _____

RECEIVING AREA
Name/No. T3

Site Name/Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES (NO)
If YES, was reading > 50 micro roentgens? (circle one) YES (NO)
Chemical Analysis (Mg/l) Chloride _____
Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jacob Vazquez — NAME (PRINT)
9-5-19 — DATE
Foreman — TITLE
SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170981

Operator No. _____
Operators Name Marathon Oil
Address 411 S Tidwell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Ridge Rd East 25 26 24 H AH 2H
County Eddy
API No. 30-015-46344
Rig Name & No. _____
AFE/PO No. JA.19.02256

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Muds		Washout Water (Non-Injectable)		Belly Dump
Oil Based Cuttings		Completion Fluid/Flow back (Non-Injectable)		
Water Based Muds		Produced Water (Non-Injectable)		
Water Based Cuttings		Gathering Line Water/Waste (Non-Injectable)		
Produced Formation Solids		INTERNAL USE ONLY		
Tank Bottoms		Truck Washout (exempt waste)		
E&P Contaminated Soil	20			
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back

QUANTITY B - BARRELS Y - YARDS 20 E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castillo Isaac Castillo 9/5/2019
(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name Cold Spot truck BDS
Address _____
Phone No. _____

Driver's Name Humberto Sbm
Print Name _____
Phone No. _____
Truck No. 06

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

9-5-19 Hmb Sbm 9-5-19 Hmb Sbm
SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP
IN: 7:22 OUT: _____

RECEIVING AREA
Name/No. 3

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES (NO) If YES, was reading > 50 micro roentgens? (circle one) YES (NO)
Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

John Jones 9-5-19 Foreman
NAME (PRINT) DATE TITLE SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170979

Operator No. _____
Operators Name Marathon Oil
Address 4111 S. Tidwell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 323 9441

Permit/RRC No. _____
Lease/Well Name & No. Rick Deckard 25 26 4 WA #1H SH
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. TAJS.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)					
Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)	
Oil Based Cuttings		Washout Water (Non-Injectable)		Drill Cuttings	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)			
Water Based Cuttings		Produced Water (Non-Injectable)			
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)			
Tank Bottoms		INTERNAL USE ONLY			
E&P Contaminated Soil	20	Truck Washout (exempt waste)			
Gas Plant Waste					

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

ISAAC CASTRO P+A SHAR HARVESTER — (PRINT) AUTHORIZED AGENTS SIGNATURE
9/5/2019 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name KLKAR LLC
Address 215 E Forest St
Lovington NM 88260
Phone No. _____

Driver's Name Ramiro Flores
Print Name _____
Phone No. 575 605 1690
Truck No. 2

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

9-5-19 — SHIPMENT DATE
DRIVER'S SIGNATURE
DELIVERY DATE
DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP
IN: 6:35 17 OUT: _____

RECEIVING AREA
Name/No. T3

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES (NO) If YES, was reading > 50 micro roentgens? (circle one) YES (NO)
Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jack — NAME (PRINT)
9-5-19 — DATE
Rep — TITLE
SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170978

Operator No. _____
Operators Name Mewbourne Oil
Address 4111 S. Tidwell Road
City, State, Zip Carlsbad, NM 88220
Phone No. 575 393 9411

Permit/RRC No. _____
Lease/Well Name & No. Rick Deckard 25 20 S WA 1H 31164
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. TA I.D. 02259

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	Drill Mud
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	20	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

ISAAC CASTRO PRO SHARE HARVESTER — (PRINT) AUTHORIZED AGENTS SIGNATURE
9/5/2014 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name J&R Monroe Trucking
Address _____
Phone No. _____

Driver's Name Jesse M
Print Name _____
Phone No. _____
Truck No. 209

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

9-5-14 — SHIPMENT DATE
Jesse M — DRIVER'S SIGNATURE
9-5-14 — DELIVERY DATE
Jesse M — DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP
IN: 6:55 OUT: _____

RECEIVING AREA
Name/No. T3

Site Name/Permit No. Red Bluff Facility/ STF-065
Phone No. 432-448-4239
Address 5053 US Highway 285, Orla, TX 79770

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jesse M — NAME (PRINT)
9-5-14 — DATE
Receiver — TITLE
SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170977

Operator No. _____
Operators Name Mewbourne Oil
Address 4111 S. Tidwell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 393 5441

Permit/RRC No. _____
Lease/Well Name & No. RITE DELVARD 25 Fed 4 WA 1H
County Eddy
API No. 30-015-45314
Rig Name & No. _____
AFE/PO No. TA.19.02268

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)		Belly Dump
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)		
Water Based Cuttings		Produced Water (Non-Injectable)		
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)		
Tank Bottoms		INTERNAL USE ONLY		
E&P Contaminated Soil	20	Truck Washout (exempt waste)		
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☒ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Cano PEER Shaz Harvester — (PRINT) AUTHORIZED AGENTS SIGNATURE
9/5/2019 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name J & R Mendoza
Address _____
Phone No. _____

Driver's Name Santos O.
Print Name _____
Phone No. _____
Truck No. 06

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

9-5-19 — SHIPMENT DATE
DRIVER'S SIGNATURE
9-5-19 — DELIVERY DATE
X — DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP
IN: 6:20 OUT: _____

RECEIVING AREA
Name/No. T3

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis Chloride (Mg/l) _____
Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jorge Lugo — NAME (PRINT)
9-5-19 — DATE
Receiver — TITLE
SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170982

Operator No. _____
Operators Name Marathon Oil
Address 4111 S. Tidwell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Rick Deck 22 25 28 H
County Eddy
API No. 30-015-45364
Rig Name & No. _____
AFE/PO No. TA 19 02259

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Muds		Washout Water (Non-Injectable)		Drill Mud
Oil Based Cuttings		Completion Fluid/Flow back (Non-Injectable)		
Water Based Muds		Produced Water (Non-Injectable)		
Water Based Cuttings		Gathering Line Water/Waste (Non-Injectable)		
Produced Formation Solids		INTERNAL USE ONLY		
Tank Bottoms		Truck Washout (exempt waste)		
E&P Contaminated Soil	20			
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro Diaz Supervisor (PRINT) AUTHORIZED AGENT'S SIGNATURE — 9/5/2019 DATE — SIGNATURE

TRANSPORTER

Transporter's Name Gold Speed / BDS
Address _____
Phone No. _____

Driver's Name Mario Burciaga
Print Name Mario Burciaga
Phone No. _____
Truck No. 28

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

9-5-19 SHIPMENT DATE — Mario Burciaga DRIVER'S SIGNATURE — 9-5-19 DELIVERY DATE — DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP
IN: 7:44 pm OUT: _____

RECEIVING AREA
Name/No. T3

Site Name/Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jorge Gomez NAME (PRINT) — 9-5-19 DATE — Director TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170980

Operator No. _____
Operators Name Marathon (1)
Address 411 S. Tarwell Road
City, State, Zip Odessa, TX 79761
Phone No. 575 323 2411

Permit/RRC No. _____
Lease/Well Name & No. Rickenbacker 25 Fed 4 WA 1H & 5H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. TA 19-02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Muds		Washout Water (Non-Injectable)		Bell-1 Dump
Oil Based Cuttings		Completion Fluid/Flow back (Non-Injectable)		
Water Based Muds		Produced Water (Non-Injectable)		
Water Based Cuttings		Gathering Line Water/Waste (Non-Injectable)		
Produced Formation Solids		INTERNAL USE ONLY		
Tank Bottoms		Truck Washout (exempt waste)		
E&P Contaminated Soil	20			
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro per Sion Harkrider — 9/5/2019 — _____

(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name JR Trucking
Address 2000 Thomstead
Phone No. 575 631 6614

Driver's Name Moises Gonzalez
Print Name _____
Phone No. _____
Truck No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

_____ SHIPMENT DATE — _____ DRIVER'S SIGNATURE — _____ DELIVERY DATE — Moises Gonzalez DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 7:05 OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. T3

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES (NO) If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jorge Cruz — 4-5-19 — Foreman — _____

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170975

Operator No. _____
Operators Name Marathon O.I
Address 411 S. 1st, Artesia
City, State, Zip Carlsbad, NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Rick Deckard 25 28 S WA #1H 2H 5H 6H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. IA 18 02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)		
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)		
Water Based Cuttings		Produced Water (Non-Injectable)		
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)		
Tank Bottoms		INTERNAL USE ONLY		
E&P Contaminated Soil	20	Truck Washout (exempt waste)		
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro Pg 12 Supv Harvester — 9/5/2020 — Signature

(PRINT) AUTHORIZED AGENTS SIGNATURE | DATE | SIGNATURE

TRANSPORTER

Transporter's Name Limon's Trucking LLC
Address PO Box 117 Loco Hill, NM 88255
Phone No. _____

Driver's Name Robert Medrano Jr
Print Name _____
Phone No. _____
Truck No. 65

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____ DELIVERY DATE _____ DRIVER'S SIGNATURE _____

TRUCK TIME STAMP
IN: 2:11 PM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No. Red Bluff Facility/ STF-065
Address 5053 US Highway 285, Orla, TX 79770
Phone No. 432-448-4239

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Name (Print) — Date 9/5/20 — Title — Signature

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170973

Operator No. _____
Operators Name Marathon Oil
Address 4111 S. Tidwell Road
City, State, Zip Carlsbad, NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Rice Draw Fed 25 Com WA #3H 9H 6H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. TA.19.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Muds		Washout Water (Non-Injectable)		
Oil Based Cuttings		Completion Fluid/Flow back (Non-Injectable)		
Water Based Muds		Produced Water (Non-Injectable)		
Water Based Cuttings		Gathering Line Water/Waste (Non-Injectable)		
Produced Formation Solids		INTERNAL USE ONLY		
Tank Bottoms		Truck Washout (exempt waste)		
E&P Contaminated Soil	20			
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS 20 E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Casper for Shad Harvey — 9/6/2019 — Signature

(PRINT) AUTHORIZED AGENTS SIGNATURE | DATE | SIGNATURE

TRANSPORTER

Transporter's Name JSR Transport/PDS
Address P. Box 1031
Loving, NM 88256
Phone No. _____

Driver's Name _____
Print Name _____
Phone No. _____
Truck No. #3

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE | DRIVER'S SIGNATURE | DELIVERY DATE | DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 202PM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride _____
Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Printed Name | 9/6/19 | FEC | Signature

NAME (PRINT) | DATE | TITLE | SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name
Phone No.

NO. 170972

GENERATOR

Operator No.
Operators Name: Mewbourne Oil
Address: 4111 S. Tidwell Street
City, State, Zip: Carlsbad NM 88220
Phone No.: 575-393-5441

Permit/RRC No.
Lease/Well Name & No.: Pure Darkness 25/24 W2HS #1H
County: Eddy
API No.: 30-015-45344
Rig Name & No.
AFE/PO No.: TA.19.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	20	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro Chap Waste 3/5/2019

(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name: J&R Transport LLC
Address
Phone No.

Driver's Name: Jesus Velazquez
Print Name
Phone No.
Truck No.: 5

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE — DRIVER'S SIGNATURE — DELIVERY DATE — DRIVER'S SIGNATURE

TRUCK TIME STAMP IN: 7:30 OUT:

DISPOSAL FACILITY

Site Name/ Permit No.: **Red Bluff Facility/ STF-065**
Address: **5053 US Highway 285, Orla, TX 79770**
Phone No.: **432-448-4239**

RECEIVING AREA Name/No.

NORM READINGS TAKEN? (Circle One) YES NO — If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

Isaac Castro 3/5/19 ICC

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170976

Operator No. _____
Operators Name Marathon Oil
Address 4111 S. Tidwell Road
City, State, Zip Houston, TX 77220
Phone No. 575 393 7141

Permit/RRC No. _____
Lease/Well Name & No. Rick Deck A SD 25 28 4 WA 1H 3H 4H
County Eddy
API No. 30-015-45341
Rig Name & No. _____
AFE/PO No. 1A.14.02259

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)		
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)		
Water Based Cuttings		Produced Water (Non-Injectable)		
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)		
Tank Bottoms		INTERNAL USE ONLY		
E&P Contaminated Soil	20	Truck Washout (exempt waste)		
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Israel Castro Perez Sam Harvester 9/6/2019 _____
(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name _____
Address _____
Phone No. _____

Driver's Name _____
Print Name _____
Phone No. _____
Truck No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____ DELIVERY DATE _____ DRIVER'S SIGNATURE _____

TRUCK TIME STAMP
IN: _____ OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride _____
Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

NAME (PRINT) _____ DATE _____ TITLE _____ SIGNATURE _____

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

NO. 170974

GENERATOR

Operator No. _____
Operators Name Marathon Oil
Address 4111 S. Tidwell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 234 9441

Permit/RRC No. _____
Lease/Well Name & No. Rich Dellcard 35294 WA 113H SH
County Eddy
API No. 30-015-46344
Rig Name & No. _____
AFE/PO No. TA 19.02253

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	20	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro Jr. Senior Harvester 9/5/2019 _____
(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name _____
Address _____
Phone No. _____

Driver's Name _____
Print Name _____
Phone No. _____
Truck No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

_____ _____ _____ _____
SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 11AM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride _____
Conductivity (mmhos/cm) _____ pH _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

[illegible] 9/5/19 [illegible] [illegible]
NAME (PRINT) DATE TITLE SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170970

Operator No. _____
Operators Name Marathon Oil
Address 4111 S. Lindbergh Road
City, State, Zip Carlsbad, NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Pike Deleware D25-3C
County Lea
API No. 30-025-45341
Rig Name & No. _____
AFE/PO No. 12.12.02769

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	20	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS 20 E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

I am Castro For Shane Hanson 9/6/2014

(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name Gold Speed Trucking/ROS
Address _____
Phone No. _____

Driver's Name Humberto Abrea
Print Name _____
Phone No. _____
Truck No. 06

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE — DRIVER'S SIGNATURE — DELIVERY DATE — DRIVER'S SIGNATURE

TRUCK TIME STAMP IN: 2:29PM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA Name/No. _____

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Humberto Abrea — 9/6/14 — TA — Humberto Abrea

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name
Phone No.

GENERATOR

NO. 170971

Operator No.
Operators Name: Elevation O.I
Address: 4111 S Tidwell Road
City, State, Zip: Odessa TX 79762
Phone No.: 575-393-9411

Permit/RRC No.
Lease/Well
Name & No.: Rick Deckard 25294 WA1H2H
County: Ector
API No.: 30-015-45341
Rig Name & No.
AFE/PO No.: TA.19.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings	Washout Water (Non-Injectable)	
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings	Produced Water (Non-Injectable)	
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms	INTERNAL USE ONLY	
E&P Contaminated Soil: 20	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other: *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro for Shaz Hanson 9/5/2019
(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name: JR Trucking / KDS
Address: 3000 Homestead
Phone No.: 575-631-0871

Driver's Name: Miguel Hernandez
Print Name
Phone No.
Truck No.

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE — DRIVER'S SIGNATURE — DELIVERY DATE — DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 1120 OUT:

DISPOSAL FACILITY

Site Name/ Permit No.: **Red Bluff Facility/ STF-065**
Address: **5053 US Highway 285, Orla, TX 79770**
Phone No.: **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride
Conductivity (mmhos/cm) pH

RECEIVING AREA
Name/No.

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name
Phone No.

GENERATOR

NO. 170969

Operator No.
Operators Name
Address
City, State, Zip
Phone No.

Permit/RRC No.
Lease/Well Name & No.
County EDDY
API No. 30-015-45344
Rig Name & No.
AFE/PO No. TA 19 02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings	Washout Water (Non-Injectable)	
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings	Produced Water (Non-Injectable)	
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms	INTERNAL USE ONLY	
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste 20		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☒ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other *please select from **Non-Exempt Waste List** on back

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name
Address
Phone No.

Driver's Name
Print Name
Phone No.
Truck No.

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

DISPOSAL FACILITY

TRUCK TIME STAMP IN: OUT:

RECEIVING AREA Name/No.

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Phone No. **432-448-4239**
Address **5053 US Highway 285, Orla, TX 79770**

NORM READINGS TAKEN? (Circle One) YES NO If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride Conductivity (mmhos/cm) pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT) DATE TITLE SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170966

Operator No. _____
Operators Name Marathon Oil
Address 411 S. Dowell Road
City, State, Zip Carlsbad, NM 88220
Phone No. 575 234 4411

Permit/RRC No. _____
Lease/Well Name & No. Rick Dalkard 25-36-4 #1A 1H 2H SH
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. 1A1-10252

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Muds		Washout Water (Non-Injectable)		
Oil Based Cuttings		Completion Fluid/Flow back (Non-Injectable)		
Water Based Muds		Produced Water (Non-Injectable)		
Water Based Cuttings		Gathering Line Water/Waste (Non-Injectable)		
Produced Formation Solids		INTERNAL USE ONLY		
Tank Bottoms		Truck Washout (exempt waste)		
E&P Contaminated Soil	BL			
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Raul Castro for Silver Dollar Trucking LLC (PRINT) AUTHORIZED AGENTS SIGNATURE — 2/5/2019 DATE — SIGNATURE

TRANSPORTER

Transporter's Name J&R Mendez Trucking LLC
Address _____
Phone No. _____

Driver's Name _____
Print Name _____
Phone No. _____
Truck No. 408

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____ DELIVERY DATE _____ DRIVER'S SIGNATURE _____

TRUCK TIME STAMP IN: 1:52PM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA Name/No. _____

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

NAME (PRINT) _____ DATE _____ TITLE _____ SIGNATURE _____

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name
Phone No.

NO. 170967

GENERATOR

Operator No.
Operators Name: Mewbourne Oil
Address: 4111 S Tidwell Road
City, State, Zip: Carlsbad, NM 88220
Phone No.: 575 323 9411

Permit/RRC No.
Lease/Well Name & No.: Pink Dalhart D 26-35 4WA 11H
County: EDDY
API No.: 30-015-45344
Rig Name & No.
AFE/PO No.: TA 19.02259

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	20	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castruita Sworn Homuestead — (PRINT) AUTHORIZED AGENTS SIGNATURE
9/5/2019 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name: Gold D BDS
Address
Phone No.
Driver's Name
Print Name
Phone No.
Truck No.

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE — DRIVER'S SIGNATURE — DELIVERY DATE — DRIVER'S SIGNATURE

TRUCK TIME STAMP

IN: 5 AM OUT:

DISPOSAL FACILITY

Site Name/ Permit No.: **Red Bluff Facility/ STF-065**
Address: **5053 US Highway 285, Orla, TX 79770**
Phone No.: **432-448-4239**

RECEIVING AREA

Name/No.

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride
Conductivity (mmhos/cm) pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

Mario Mendoza — NAME (PRINT)
9/5/19 — DATE
V.P. — TITLE
SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170965

Operator No. _____
Operators Name Marathon Oil
Address 4111 S. Andrews Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 393 9174

Permit/RRC No. _____
Lease/Well Name & No. Pink Deckard 25 28 4 WA 1H 31 15H
County Eddy
API No. 30-015-45241
Rig Name & No. _____
AFE/PO No. TA 19-02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil		Truck Washout (exempt waste)	
Gas Plant Waste	ALL		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castillo for Shane Harvestad — 9/5/2019 — [signature]
(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name Limon Trucking LLC/PDS
Address PO Box 117 Hobbs NM 88241
Phone No. _____

Driver's Name Roberto Medina Garcia
Print Name Roberto Medina G
Phone No. _____
Truck No. 08

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____ DELIVERY DATE _____ DRIVER'S SIGNATURE _____

TRUCK TIME STAMP IN: 1:57PM OUT: _____

DISPOSAL FACILITY

Site Name/ Permit No. Red Bluff Facility/ STF-065
Address 5053 US Highway 285, Orla, TX 79770
Phone No. 432-448-4239

RECEIVING AREA Name/No. _____

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

[signature] — 9/5/19 — RC — [signature]
NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

NO. 170964

GENERATOR

Operator No. _____
Operators Name Harvard Oil
Address 2411 S. 7 Rivers Road
City, State, Zip Carlsbad, NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Rick Dalyard 25 24 4 RC 1H 31H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. TA.19.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Muds		Washout Water (Non-Injectable)		
Oil Based Cuttings		Completion Fluid/Flow back (Non-Injectable)		
Water Based Muds		Produced Water (Non-Injectable)		
Water Based Cuttings		Gathering Line Water/Waste (Non-Injectable)		
Produced Formation Solids		INTERNAL USE ONLY		
Tank Bottoms		Truck Washout (exempt waste)		
E&P Contaminated Soil	20			
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro for Shane Industrial 9/5/2019

(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name _____
Address _____
Phone No. _____

Driver's Name _____
Print Name _____
Phone No. _____
Truck No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 12 SCHM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No. Red Bluff Facility/ STF-065
Address 5053 US Highway 285, Orla, TX 79770
Phone No. 432-448-4239

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____
Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

NAME (PRINT) DATE TITLE SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name
Phone No.

NO. 170968

GENERATOR

Operator No.
Operators Name
Address
City, State, Zip
Phone No.
Permit/RRC No.
Lease/Well Name & No.
County
API No.
Rig Name & No.
AFE/PO No.

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	20	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other *please select from **Non-Exempt Waste List** on back

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name
Address
Phone No.
Driver's Name
Print Name
Phone No.
Truck No.

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE — DRIVER'S SIGNATURE — DELIVERY DATE — DRIVER'S SIGNATURE

TRUCK TIME STAMP IN: OUT:

DISPOSAL FACILITY

RECEIVING AREA Name/No.

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride
Conductivity (mmhos/cm) pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

NO. 170962

GENERATOR

Operator No. _____
Operators Name Marathon Oil
Address 411 S. Airline Road
City, State, Zip Carlsbad NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Pierce Federal 25 24 4 WA 1H 2H 3H 4H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. 1A 1.0 2259

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil		Truck Washout (exempt waste)	
Gas Plant Waste	✓		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS 20 E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Kyle Constantine Red Bluff Facility Mgr | 9/6/2021 | [signature]
(PRINT) AUTHORIZED AGENTS SIGNATURE | DATE | SIGNATURE

TRANSPORTER

Transporter's Name JSR Transport
Address PO Box 1031
Lovington NM 88260
Phone No. _____

Driver's Name Raul C
Print Name _____
Phone No. _____
Truck No. 113

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE | DRIVER'S SIGNATURE | DELIVERY DATE | DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 12 PM OUT: _____

DISPOSAL FACILITY

Site Name/Permit No. Red Bluff Facility/ STF-065
Address 5053 US Highway 285, Orla, TX 79770
Phone No. 432-448-4239

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

RECEIVING AREA
Name/No. _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Kyle Constantine | 9-7-21 | Rec | [signature]
NAME (PRINT) | DATE | TITLE | SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170963

Operator No. _____
Permit/RRC No. _____
Operators Name: Marathon Oil
Lease/Well Name & No.: Pick Dickard 2529 4 WA 1H 2H 5H 6H
Address: 4111 S Tidwell Road
County: Eddy
API No.: 30-015-45344
City, State, Zip: Carlsbad, NM 88220
Rig Name & No. _____
Phone No.: 575 393 9441
AFE/PO No.: TA 19-00258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)		
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)		
Water Based Cuttings		Produced Water (Non-Injectable)		
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)		
Tank Bottoms		INTERNAL USE ONLY		
E&P Contaminated Soil		Truck Washout (exempt waste)		
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS 20 E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro Rig Shift Supervisor 9/6/2019 _____

(PRINT) AUTHORIZED AGENTS SIGNATURE | DATE | SIGNATURE

TRANSPORTER

Transporter's Name: J+R Transport LLC BDS
Address: P.O. Box 1031
Eunice NM 88231
Phone No.: 575 408-4237
Driver's Name: Jacob Velazquez
Print Name _____
Phone No. _____
Truck No. 5

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

_____ SHIPMENT DATE | _____ DRIVER'S SIGNATURE | _____ DELIVERY DATE | _____ DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 1:11PM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No.: Red Bluff Facility/ STF-065
Phone No.: 432-448-4239
Address: 5053 US Highway 285, Orla, TX 79770

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____
Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Isaac Davila 9/6/19 TC Isaac Davila

NAME (PRINT) | DATE | TITLE | SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170959

Operator No. _____
Operators Name Mewbourne Oil
Address 500 W. Texas Suite 1020
City, State, Zip Midland TX 79701
Phone No. 432 682 5311

Permit/RRC No. _____
Lease/Well Name & No. Pecan Deep 25 Fed Com 1H
County Eddy
API No. 30-015-41534
Rig Name & No. _____
AFE/PO No. FA 18.02256

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)		
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)		
Water Based Cuttings		Produced Water (Non-Injectable)		
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)		
Tank Bottoms		INTERNAL USE ONLY		
E&P Contaminated Soil		Truck Washout (exempt waste)		
Gas Plant Waste				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS 20 E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro Jr. Super Hot Shot | 9/5/2019 | Signature

(PRINT) AUTHORIZED AGENTS SIGNATURE | DATE | SIGNATURE

TRANSPORTER

Transporter's Name JR Trucking
Address 2000 Homestead
Phone No. 575 631 6061

Driver's Name Moises Gonzalez
Print Name _____
Phone No. _____
Truck No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE | DRIVER'S SIGNATURE | DELIVERY DATE | Moises Gonzalez DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 1000 OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Jose Valdez | 9-5-19 | PC | Signature

NAME (PRINT) | DATE | TITLE | SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name
Phone No.

GENERATOR

NO. 170960

Operator No.
Operators Name
Address
City, State, Zip Carlsbad NM 88220
Phone No. 575 725 9441

Permit/RRC No.
Lease/Well Name & No. Pink Duckard 25 26 U 1H thru 4H
County
API No. 30-015-45241
Rig Name & No.
AFE/PO No. 1A 19-02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil		Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other *please select from **Non-Exempt Waste List** on back

QUANTITY B - BARRELS Y - YARDS 20 E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro a/k/a Shane Harvey 9/5/2019
(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name Gold Speed Trucking LLC
Address #06
Phone No.
Driver's Name Humberto Sosa
Print Name
Phone No.
Truck No. 06

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 10:11 OUT:

DISPOSAL FACILITY

RECEIVING AREA
Name/No.

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride Conductivity (mmhos/cm) pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT) DATE TITLE SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170958

Operator No. _____
Operators Name Marathon O.I
Address 411 S Dowlen Road
City, State, Zip Cardsbad NM 88220
Phone No. 575 393 9441

Permit/RRC No. _____
Lease/Well Name & No. Richardson 32 #1 WA 1H 2H 3H
County Eddy
API No. 30-015-45241
Rig Name & No. _____
AFE/PO No. TA 19 02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings	Washout Water (Non-Injectable)	
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings	Produced Water (Non-Injectable)	
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms	INTERNAL USE ONLY	
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Correa for Shane Hamilton — 5/5/2016 — Shane Hamilton

(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name Jones Mendoza LLC
Address JR Mendoza Trucking LLC
BOX
Phone No. _____

Driver's Name Juan Mendoza
Print Name _____
Phone No. _____
Truck No. 25

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE — DRIVER'S SIGNATURE — DELIVERY DATE — DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 11:14AM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

NO. 170957

GENERATOR

Operator No. _____
Operators Name Marathon Oil
Address 4111 S. Tidwell Road
City, State, Zip Carlsbad, NM 88220
Phone No. 575 323 9441

Permit/RRC No. _____
Lease/Well Name & No. Rick Deckard D25294 WA #1H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. TA 19.62258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil		Truck Washout (exempt waste)	
Gas Plant Waste	4		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS 20 E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Jose Ramon Sanchez 9/5/2019
(PRINT) AUTHORIZED AGENTS SIGNATURE DATE SIGNATURE

TRANSPORTER

Transporter's Name Gold Spade / BDS
Address _____
Phone No. _____

Driver's Name Jose Ramon
Print Name _____
Phone No. _____
Truck No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 11 AM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA
Name/No. _____

Site Name/ Permit No. Red Bluff Facility/ STF-065
Address 5053 US Highway 285, Orla, TX 79770
Phone No. 432-448-4239

NORM READINGS TAKEN? (Circle One) YES NO
If YES, was reading > 50 micro roentgens? (circle one) YES NO
Chemical Analysis (Mg/l) Chloride _____
Conductivity (mmhos/cm) _____ pH _____

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Manuel Navarrete 9/5/19 PEC
NAME (PRINT) DATE TITLE SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name _____
Phone No. _____

GENERATOR

NO. 170961

Operator No. _____
Operators Name Marathon Oil
Address 4111 S. Tidwell Road
City, State, Zip Carlsbad NM 88220
Phone No. 575-393-9411

Permit/RRC No. _____
Lease/Well Name & No. Rita Deer 25 Fed 4H 1H 2H 5H 6H
County Eddy
API No. 30-015-45344
Rig Name & No. _____
AFE/PO No. 1A.19-02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings	Washout Water (Non-Injectable)	
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings	Produced Water (Non-Injectable)	
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms	INTERNAL USE ONLY	
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from **Non-Exempt Waste List** on back*

QUANTITY B - BARRELS Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

Isaac Castro for Simon Harvest Svcs — (PRINT) AUTHORIZED AGENTS SIGNATURE
9/5/2019 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name J R K Mendoza / APC
Address _____
Phone No. _____

Driver's Name Isaac C.
Print Name _____
Phone No. _____
Truck No. 06

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____ DELIVERY DATE _____ DRIVER'S SIGNATURE _____

TRUCK TIME STAMP

IN: 11:50AM OUT: _____

DISPOSAL FACILITY

Site Name/ Permit No. **Red Bluff Facility/ STF-065**
Address **5053 US Highway 285, Orla, TX 79770**
Phone No. **432-448-4239**

RECEIVING AREA

Name/No. _____

NORM READINGS TAKEN? (Circle One) YES NO If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride _____ Conductivity (mmhos/cm) _____ pH

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? _____

Mark Newman — NAME (PRINT)
9-5-19 — DATE
PC — TITLE
Mark Newman — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

R360 ENVIRONMENTAL SOLUTIONS

TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT) *REQUIRED INFORMATION*

Company Man Contact Information
Name
Phone No.

GENERATOR

NO. 170988

Operator No.
Operators Name: Marathon Oil
Address: 4111 S Tidwell Road
City, State, Zip: Carlsbad NM 88220
Phone No.: 575 323 9411

Permit/RRC No.
Lease/Well Name & No.: Pitt Draw ABD 25 24 WA com 2H
County: Eddy
API No.: 30-015-45244
Rig Name & No.
AFE/PO No.: TA.019.02258

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings		Washout Water (Non-Injectable)	
Water Based Muds		Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings		Produced Water (Non-Injectable)	
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms		INTERNAL USE ONLY	
E&P Contaminated Soil	2	Truck Washout (exempt waste)	
Gas Plant Waste			

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☑ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount
All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other: *please select from **Non-Exempt Waste List** on back*

QUANTITY — B - BARRELS — Y - YARDS — E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

(PRINT) AUTHORIZED AGENTS SIGNATURE — DATE — SIGNATURE

TRANSPORTER

Transporter's Name: KIKIR LLC / FBS
Address: 215 E Forrest St
Lovington NM 88260
Phone No.: 575 605 1690

Driver's Name: Jose Flores
Print Name
Phone No.
Truck No.: 2

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE — DRIVER'S SIGNATURE — DELIVERY DATE — DRIVER'S SIGNATURE

TRUCK TIME STAMP
IN: 11:30 AM OUT:

DISPOSAL FACILITY

Site Name/ Permit No.: Red Bluff Facility/ STF-065
Address: 5053 US Highway 285, Orla, TX 79770
Phone No.: 432-448-4239

NORM READINGS TAKEN? (Circle One) YES NO — If YES, was reading > 50 micro roentgens? (circle one) YES NO

Chemical Analysis (Mg/l) Chloride — Conductivity (mmhos/cm) — pH

RECEIVING AREA
Name/No.

TANK BOTTOMS

	Feet	Inches
1st Gauge		
2nd Gauge		
Received		

BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT) — DATE — TITLE — SIGNATURE

White - ORIGINAL Blue - TRANSPORTER Yellow - GENERATOR

Version 1

ATTACHMENT 6

Table 3. Soil Characterization - Salinity and Petroleum Hydrocarbon Parameters
Client Name: Marathon Oil Permian LLC
Site Name: Rick Declard 25 28 4
Project #: 19E-00614-011
Lab Report(s): 1908B23, 1908F01

Table 3. Soil Analysis																		
Sample Description			Field Screening			Petroleum Hydrocarbons												Inorganic
						Volatile							Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Quantab Result (High/Low)	Benzene	Toluene	Ethylbenzene	Xylenes (o&m)	Xylenes (p)	Xylenes (Total)	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	Total Petroleum Hydrocarbons (TPH)	Chloride
			(ppm)	(ppm)	(+/-)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BG19-01	**0**	2018-08-19	0.4	12	32	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND
BG19-01	**1**	2019-08-19	1.1	23	32	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND
BG19-01	**2**	2019-08-19	1.2	27	0	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND
Base 19-01	**0.5**	2019-08-19	0.5	3	241	ND	ND	ND			ND	ND	ND	ND	ND	ND	120.0
Base 19-02	**0.5**	2019-08-19	0.9	22	436	ND	ND	ND			ND	ND	ND	ND	ND	ND	**980.0**
Base 19-02	**1**	2019-08-24	0.0	0	32	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND
Base 19-03	**0.5**	2019-08-19	0.8	21	337	ND	ND	ND			ND	ND	ND	ND	ND	ND	**700.0**
Base 19-03	**1**	2019-08-24				ND	ND	ND			ND	ND	ND	ND	ND	ND	ND
Base 19-04	**0.5**	2019-08-19	1.5	59	241	ND	ND	ND			ND	ND	ND	ND	ND	ND	150.0
Base 19-05	**0.5**	2019-08-19	0.7	47	**316**	ND	ND	ND			ND	ND	ND	ND	ND	ND	330.0
Base 19-06	**0.5**	2019-08-19	0.3	42	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	220.0
Base 19-07	**0.5**	2019-08-19	5.5	72	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	340.0
Base 19-08	**0.5**	2019-08-19	0.8	85	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	330.0
Base 19-09	**0.5**	2019-08-19	0.0	36	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	100.0
Base 19-10	**0.5**	2019-08-19	1.3	40	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	240.0
Base 19-11	**1**	2019-08-19	0.9	33	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	570.0
Base 19-12	**1**	2019-08-19	2.1	58	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	**760.0**
Base 19-12	**1.5**	2019-08-24	0.0	0	172	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND
Base 19-13	**1**	2019-08-19	1.5	42	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	450.0
Base 19-14	**1**	2019-08-19	1.1	65	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	**830.0**
Base 19-14	**1.5**	2019-08-24	0.0	0	219	ND	ND	ND			ND	ND	ND	ND	ND	ND	270.0
Base 19-15	**1**	2019-08-19	0.9	63	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	**630.0**
Base 19-15	**1.5**	2019-08-24	0.0	0	393	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND
Base 19-16	**1**	2019-08-19	0.4	60	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	**700.0**
Base 19-16	**1.5**	2019-08-24	0.0	0	0	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND
Base 19-17	**1**	2019-08-19	1.5	50	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	**820.0**

VERTEX

Table 3. Soil Analysis

Sample Description			Field Screening			Petroleum Hydrocarbons											Inorganic
						Volatile							Extractable				
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Quantab Result (High/Low)	Benzene	Toluene	Ethylbenzene	Xylenes (o&m)	Xylenes (p)	Xylenes (Total)	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	Total Petroleum Hydrocarbons (TPH)	Chloride
			(ppm)	(ppm)	(+/-)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Base 19-17	**2**	2019-08-24	0.0	0	88	ND	ND	ND			ND	ND	ND	ND	ND	ND	110.0
Base 19-18	**0.5**	2019-08-19	0.4	50	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	**4,200.0**
Base 19-18	**1**	2019-08-24	0.0	0	219	ND	ND	ND			ND	ND	ND	ND	ND	ND	280.0
Base 19-19	**3**	2019-08-19	0.5	88	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	**1,800.0**
Base 19-19	**3.5**	2019-08-24	0.0	0	295	ND	ND	ND			ND	ND	ND	ND	ND	ND	320.0
Base 19-20	**0.5**	2019-08-19	0.3	58	600	ND	ND	ND			ND	ND	ND	32	ND	32	**3,100.0**
Base 19-20	**1**	2019-08-24	0.0	0	317	ND	ND	ND			ND	ND	ND	ND	ND	ND	160.0
Base 19-21	**0.5**	2019-08-19	0.4	38	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	**870.0**
Base 19-21	**1**	2019-08-24	0.0	0	38	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND
Base 19-22	**0.5**	2019-08-19	0.3	66	600	ND	ND	ND			ND	ND	ND	ND	ND	ND	150.0

Bold and Shaded indicates exceedance outside of applied action level. Additional remediation was completed.

ATTACHMENT 7

Sharlene Harvester

From: Dennis Williams
Sent: September 23, 2019 12:19 PM
To: Sharlene Harvester
Cc: Kathlene Meadows
Subject: FW: Marathon Oil Company - Rick Deckard State 25-28-4 WA #2H - RP Not Yet Assigned - Final Confirmatory Sampling

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From: Dhugal Hanton <DHanton@vertex.ca>
Sent: August 17, 2019 9:59 AM
To: icastro@marathonoil.com; mike.bratcher@state.nm.us; robert.hamlet@state.nm.us; victoria.venegas@state.nm.us
Cc: Johnson, Misti M. (MRO) <mjohnson4@marathonoil.com>; Dennis Williams <DWilliams@vertex.ca>
Subject: Marathon Oil Company - Rick Deckard State 25-28-4 WA #2H - RP Not Yet Assigned - Final Confirmatory Sampling

Good Morning All,

Please accept this notification that Vertex Resource Services will be completing final confirmatory sampling on the above mentioned location on Monday, August 19th at approximately 10:30am. Jason Crabtree will be on site for Vertex to complete the work. If you have any questions or concerns, please do not hesitate to contact me.

Cheers,
Dhuga

Dhugal Hanton B.Sc., P.Ag., SR/WA, P.Biol.
Vice President,
US Operations

Vertex Resource Services Inc.
7223 Empire Central Drive,
Houston, TX
77040

O 832-535-1585 Ext. 700
C 832-588-0674

From: Castro, Isaac (MRO) [mailto:icastro@marathonoil.com]
Sent: August 1, 2019 6:06 PM
To: mike.bratcher@state.nm.us; robert.hamlet@state.nm.us; victoria.venegas@state.nm.us
Cc: Johnson, Misti M. (MRO) <mjohnson4@marathonoil.com>; Dhugal Hanton <DHanton@vertex.ca>; Dennis Williams <DWilliams@vertex.ca>
Subject: Marathon Oil Company - 24 hour notification - Rick Deckard State 25-28-4 WA #2H

Good afternoon,

Yesterday at 4:30 pm, the Operator reported a small leak from an AST tank. Approximately 18.31 bbls of produced water was released the ground. A vac truck was immediately dispatched and recovered 15 bbls of fluids.

A C141 will be submitted shortly.

Thank you,

Isaac Castro
Advanced Environmental Technician
Marathon Oil Company - Permian Asset
4111 S. Tidwell Road
Carlsbad, NM 88220
Cell: (575) 988-0561 **Email:** icastro@marathonoil.com

ATTACHMENT 8

Analytical Report
Lab Order **1908B23**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: BG19-01 0'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:00:00 AM
Lab ID: 1908B23-001 **Matrix:** SOIL **Received Date:** 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/21/2019 9:37:40 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 9:37:40 AM
Surr: DNOP	90.3	70-130		%Rec	1	8/21/2019 9:37:40 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 11:58:00 AM
Surr: BFB	90.1	77.4-118		%Rec	1	8/21/2019 11:58:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 11:58:00 AM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 11:58:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 11:58:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 11:58:00 AM
Surr: 4-Bromofluorobenzene	91.6	80-120		%Rec	1	8/21/2019 11:58:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	ND	59		mg/Kg	20	8/21/2019 10:37:03 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: BG19-01 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:05:00 AM
Lab ID: 1908B23-002 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/21/2019 10:49:45 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 10:49:45 AM
Surr: DNOP	91.2	70-130		%Rec	1	8/21/2019 10:49:45 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 1:31:49 PM
Surr: BFB	90.2	77.4-118		%Rec	1	8/21/2019 1:31:49 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 1:31:49 PM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 1:31:49 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 1:31:49 PM
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 1:31:49 PM
Surr: 4-Bromofluorobenzene	91.1	80-120		%Rec	1	8/21/2019 1:31:49 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	ND	60		mg/Kg	20	8/21/2019 10:49:28 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: BG19-01 2'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:10:00 AM
Lab ID: 1908B23-003 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	8/21/2019 11:13:54 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/21/2019 11:13:54 AM
Surr: DNOP	92.1	70-130		%Rec	1	8/21/2019 11:13:54 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/21/2019 2:42:24 PM
Surr: BFB	91.3	77.4-118		%Rec	1	8/21/2019 2:42:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 2:42:24 PM
Toluene	ND	0.049		mg/Kg	1	8/21/2019 2:42:24 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/21/2019 2:42:24 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/21/2019 2:42:24 PM
Surr: 4-Bromofluorobenzene	92.2	80-120		%Rec	1	8/21/2019 2:42:24 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	ND	60		mg/Kg	20	8/21/2019 11:51:31 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-01 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:15:00 AM
Lab ID: 1908B23-004 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/21/2019 11:38:00 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/21/2019 11:38:00 AM
Surr: DNOP	93.9	70-130		%Rec	1	8/21/2019 11:38:00 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/21/2019 3:05:59 PM
Surr: BFB	95.9	77.4-118		%Rec	1	8/21/2019 3:05:59 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	8/21/2019 3:05:59 PM
Toluene	ND	0.050		mg/Kg	1	8/21/2019 3:05:59 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/21/2019 3:05:59 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/21/2019 3:05:59 PM
Surr: 4-Bromofluorobenzene	97.2	80-120		%Rec	1	8/21/2019 3:05:59 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	120	60		mg/Kg	20	8/22/2019 12:03:56 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-02 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:20:00 AM
Lab ID: 1908B23-005 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/21/2019 12:02:09 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/21/2019 12:02:09 PM
Surr: DNOP	93.8	70-130		%Rec	1	8/21/2019 12:02:09 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/21/2019 3:29:32 PM
Surr: BFB	91.3	77.4-118		%Rec	1	8/21/2019 3:29:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	8/21/2019 3:29:32 PM
Toluene	ND	0.050		mg/Kg	1	8/21/2019 3:29:32 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/21/2019 3:29:32 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/21/2019 3:29:32 PM
Surr: 4-Bromofluorobenzene	91.8	80-120		%Rec	1	8/21/2019 3:29:32 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	980	60		mg/Kg	20	8/22/2019 12:16:20 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-03 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:25:00 AM
Lab ID: 1908B23-006 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/21/2019 12:26:10 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/21/2019 12:26:10 PM
Surr: DNOP	95.0	70-130		%Rec	1	8/21/2019 12:26:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/21/2019 5:03:29 PM
Surr: BFB	93.6	77.4-118		%Rec	1	8/21/2019 5:03:29 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	8/21/2019 5:03:29 PM
Toluene	ND	0.050		mg/Kg	1	8/21/2019 5:03:29 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/21/2019 5:03:29 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/21/2019 5:03:29 PM
Surr: 4-Bromofluorobenzene	94.5	80-120		%Rec	1	8/21/2019 5:03:29 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	700	60		mg/Kg	20	8/22/2019 12:28:44 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-04 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:30:00 AM
Lab ID: 1908B23-007 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	8/21/2019 12:50:06 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/21/2019 12:50:06 PM
Surr: DNOP	96.0	70-130		%Rec	1	8/21/2019 12:50:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 5:26:56 PM
Surr: BFB	97.8	77.4-118		%Rec	1	8/21/2019 5:26:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 5:26:56 PM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 5:26:56 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 5:26:56 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/21/2019 5:26:56 PM
Surr: 4-Bromofluorobenzene	98.9	80-120		%Rec	1	8/21/2019 5:26:56 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	150	60		mg/Kg	20	8/22/2019 12:41:09 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-05 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:35:00 AM
Lab ID: 1908B23-008 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/21/2019 1:14:05 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 1:14:05 PM
Surr: DNOP	94.2	70-130		%Rec	1	8/21/2019 1:14:05 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 5:50:23 PM
Surr: BFB	90.8	77.4-118		%Rec	1	8/21/2019 5:50:23 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 5:50:23 PM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 5:50:23 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 5:50:23 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/21/2019 5:50:23 PM
Surr: 4-Bromofluorobenzene	91.9	80-120		%Rec	1	8/21/2019 5:50:23 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	330	60		mg/Kg	20	8/22/2019 12:53:33 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-06 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:40:00 AM
Lab ID: 1908B23-009 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/21/2019 1:38:05 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/21/2019 1:38:05 PM
Surr: DNOP	94.8	70-130		%Rec	1	8/21/2019 1:38:05 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 6:13:56 PM
Surr: BFB	88.8	77.4-118		%Rec	1	8/21/2019 6:13:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 6:13:56 PM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 6:13:56 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 6:13:56 PM
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 6:13:56 PM
Surr: 4-Bromofluorobenzene	89.4	80-120		%Rec	1	8/21/2019 6:13:56 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	220	60		mg/Kg	20	8/22/2019 1:05:57 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-07 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:45:00 AM
Lab ID: 1908B23-010 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/21/2019 2:02:07 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/21/2019 2:02:07 PM
Surr: DNOP	97.8	70-130		%Rec	1	8/21/2019 2:02:07 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 6:37:31 PM
Surr: BFB	89.9	77.4-118		%Rec	1	8/21/2019 6:37:31 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 6:37:31 PM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 6:37:31 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 6:37:31 PM
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 6:37:31 PM
Surr: 4-Bromofluorobenzene	90.9	80-120		%Rec	1	8/21/2019 6:37:31 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	340	59		mg/Kg	20	8/22/2019 1:18:21 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-08 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:50:00 AM
Lab ID: 1908B23-011 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/21/2019 2:26:12 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/21/2019 2:26:12 PM
Surr: DNOP	96.3	70-130		%Rec	1	8/21/2019 2:26:12 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 7:01:03 PM
Surr: BFB	90.0	77.4-118		%Rec	1	8/21/2019 7:01:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 7:01:03 PM
Toluene	ND	0.047		mg/Kg	1	8/21/2019 7:01:03 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 7:01:03 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/21/2019 7:01:03 PM
Surr: 4-Bromofluorobenzene	90.5	80-120		%Rec	1	8/21/2019 7:01:03 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	330	60		mg/Kg	20	8/22/2019 1:55:34 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-09 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:55:00 AM
Lab ID: 1908B23-012 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/21/2019 2:50:12 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/21/2019 2:50:12 PM
Surr: DNOP	96.3	70-130		%Rec	1	8/21/2019 2:50:12 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/21/2019 7:24:33 PM
Surr: BFB	95.1	77.4-118		%Rec	1	8/21/2019 7:24:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 7:24:33 PM
Toluene	ND	0.049		mg/Kg	1	8/21/2019 7:24:33 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/21/2019 7:24:33 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/21/2019 7:24:33 PM
Surr: 4-Bromofluorobenzene	96.1	80-120		%Rec	1	8/21/2019 7:24:33 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	100	60		mg/Kg	20	8/22/2019 2:07:59 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-10 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:00:00 AM
Lab ID: 1908B23-013 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/21/2019 3:14:10 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/21/2019 3:14:10 PM
Surr: DNOP	97.3	70-130		%Rec	1	8/21/2019 3:14:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 7:48:02 PM
Surr: BFB	90.1	77.4-118		%Rec	1	8/21/2019 7:48:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 7:48:02 PM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 7:48:02 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 7:48:02 PM
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 7:48:02 PM
Surr: 4-Bromofluorobenzene	90.3	80-120		%Rec	1	8/21/2019 7:48:02 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	240	60		mg/Kg	20	8/22/2019 2:45:13 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-11 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:05:00 AM
Lab ID: 1908B23-014 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/21/2019 3:38:12 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 3:38:12 PM
Surr: DNOP	97.8	70-130		%Rec	1	8/21/2019 3:38:12 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 8:11:26 PM
Surr: BFB	87.7	77.4-118		%Rec	1	8/21/2019 8:11:26 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 8:11:26 PM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 8:11:26 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 8:11:26 PM
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 8:11:26 PM
Surr: 4-Bromofluorobenzene	88.4	80-120		%Rec	1	8/21/2019 8:11:26 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	570	60		mg/Kg	20	8/22/2019 9:44:56 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-12 1.0'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:10:00 AM
Lab ID: 1908B23-015 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/21/2019 4:02:20 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/21/2019 4:02:20 PM
Surr: DNOP	99.0	70-130		%Rec	1	8/21/2019 4:02:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/21/2019 8:34:51 PM
Surr: BFB	88.3	77.4-118		%Rec	1	8/21/2019 8:34:51 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	8/21/2019 8:34:51 PM
Toluene	ND	0.050		mg/Kg	1	8/21/2019 8:34:51 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/21/2019 8:34:51 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/21/2019 8:34:51 PM
Surr: 4-Bromofluorobenzene	89.0	80-120		%Rec	1	8/21/2019 8:34:51 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	760	60		mg/Kg	20	8/22/2019 9:57:17 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-13 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:15:00 AM
Lab ID: 1908B23-016 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/21/2019 4:26:25 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/21/2019 4:26:25 PM
Surr: DNOP	99.7	70-130		%Rec	1	8/21/2019 4:26:25 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/21/2019 10:08:18 PM
Surr: BFB	89.4	77.4-118		%Rec	1	8/21/2019 10:08:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	8/21/2019 10:08:18 PM
Toluene	ND	0.049		mg/Kg	1	8/21/2019 10:08:18 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/21/2019 10:08:18 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/21/2019 10:08:18 PM
Surr: 4-Bromofluorobenzene	91.1	80-120		%Rec	1	8/21/2019 10:08:18 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	450	60		mg/Kg	20	8/22/2019 10:34:20 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-14 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:20:00 AM
Lab ID: 1908B23-017 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/21/2019 4:50:33 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/21/2019 4:50:33 PM
Surr: DNOP	94.7	70-130		%Rec	1	8/21/2019 4:50:33 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 10:32:10 PM
Surr: BFB	98.1	77.4-118		%Rec	1	8/21/2019 10:32:10 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 10:32:10 PM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 10:32:10 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 10:32:10 PM
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 10:32:10 PM
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	8/21/2019 10:32:10 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	830	60		mg/Kg	20	8/22/2019 11:11:21 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-15 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:25:00 AM
Lab ID: 1908B23-018 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/21/2019 5:14:36 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/21/2019 5:14:36 PM
Surr: DNOP	97.3	70-130		%Rec	1	8/21/2019 5:14:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/21/2019 10:55:45 PM
Surr: BFB	99.9	77.4-118		%Rec	1	8/21/2019 10:55:45 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.023		mg/Kg	1	8/21/2019 10:55:45 PM
Toluene	ND	0.046		mg/Kg	1	8/21/2019 10:55:45 PM
Ethylbenzene	ND	0.046		mg/Kg	1	8/21/2019 10:55:45 PM
Xylenes, Total	ND	0.092		mg/Kg	1	8/21/2019 10:55:45 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	8/21/2019 10:55:45 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	630	60		mg/Kg	20	8/22/2019 11:23:42 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-16 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:30:00 AM
Lab ID: 1908B23-019 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/21/2019 5:38:51 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/21/2019 5:38:51 PM
Surr: DNOP	92.4	70-130		%Rec	1	8/21/2019 5:38:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 11:19:14 PM
Surr: BFB	94.1	77.4-118		%Rec	1	8/21/2019 11:19:14 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 11:19:14 PM
Toluene	ND	0.047		mg/Kg	1	8/21/2019 11:19:14 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 11:19:14 PM
Xylenes, Total	ND	0.094		mg/Kg	1	8/21/2019 11:19:14 PM
Surr: 4-Bromofluorobenzene	94.5	80-120		%Rec	1	8/21/2019 11:19:14 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	700	60		mg/Kg	20	8/22/2019 11:36:03 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-17 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:35:00 AM
Lab ID: 1908B23-020 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/21/2019 6:03:02 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 6:03:02 PM
Surr: DNOP	94.7	70-130		%Rec	1	8/21/2019 6:03:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 11:42:44 PM
Surr: BFB	92.5	77.4-118		%Rec	1	8/21/2019 11:42:44 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 11:42:44 PM
Toluene	ND	0.047		mg/Kg	1	8/21/2019 11:42:44 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 11:42:44 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/21/2019 11:42:44 PM
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	1	8/21/2019 11:42:44 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	820	60		mg/Kg	20	8/22/2019 11:48:24 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-18 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:40:00 AM
Lab ID: 1908B23-021 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/22/2019 9:15:04 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/22/2019 9:15:04 AM
Surr: DNOP	77.7	70-130		%Rec	1	8/22/2019 9:15:04 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 10:14:46 AM
Surr: BFB	99.0	77.4-118		%Rec	1	8/21/2019 10:14:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 10:14:46 AM
Toluene	ND	0.047		mg/Kg	1	8/21/2019 10:14:46 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 10:14:46 AM
Xylenes, Total	ND	0.095		mg/Kg	1	8/21/2019 10:14:46 AM
Surr: 4-Bromofluorobenzene	89.7	80-120		%Rec	1	8/21/2019 10:14:46 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	3500	60	E	mg/Kg	20	8/22/2019 12:00:45 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-19 3'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:45:00 AM
Lab ID: 1908B23-022 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	8/22/2019 9:39:00 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/22/2019 9:39:00 AM
Surr: DNOP	105	70-130		%Rec	1	8/22/2019 9:39:00 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 11:23:20 AM
Surr: BFB	96.3	77.4-118		%Rec	1	8/21/2019 11:23:20 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 11:23:20 AM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 11:23:20 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 11:23:20 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/21/2019 11:23:20 AM
Surr: 4-Bromofluorobenzene	92.4	80-120		%Rec	1	8/21/2019 11:23:20 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	1800	60		mg/Kg	20	8/22/2019 12:13:06 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-20 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:50:00 AM
Lab ID: 1908B23-023 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	32	9.7		mg/Kg	1	8/22/2019 10:02:52 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/22/2019 10:02:52 AM
Surr: DNOP	105	70-130		%Rec	1	8/22/2019 10:02:52 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 12:31:48 PM
Surr: BFB	98.2	77.4-118		%Rec	1	8/21/2019 12:31:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.023		mg/Kg	1	8/21/2019 12:31:48 PM
Toluene	ND	0.047		mg/Kg	1	8/21/2019 12:31:48 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 12:31:48 PM
Xylenes, Total	ND	0.094		mg/Kg	1	8/21/2019 12:31:48 PM
Surr: 4-Bromofluorobenzene	92.6	80-120		%Rec	1	8/21/2019 12:31:48 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	2800	60	E	mg/Kg	20	8/22/2019 12:25:26 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-21 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:55:00 AM
Lab ID: 1908B23-024 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/22/2019 10:26:49 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/22/2019 10:26:49 AM
Surr: DNOP	100	70-130		%Rec	1	8/22/2019 10:26:49 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/21/2019 12:54:41 PM
Surr: BFB	97.4	77.4-118		%Rec	1	8/21/2019 12:54:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	8/21/2019 12:54:41 PM
Toluene	ND	0.049		mg/Kg	1	8/21/2019 12:54:41 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/21/2019 12:54:41 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/21/2019 12:54:41 PM
Surr: 4-Bromofluorobenzene	90.8	80-120		%Rec	1	8/21/2019 12:54:41 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	870	60		mg/Kg	20	8/22/2019 12:37:46 PM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-22 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 12:00:00 PM
Lab ID: 1908B23-025 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/22/2019 10:50:50 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/22/2019 10:50:50 AM
Surr: DNOP	48.4	70-130	S	%Rec	1	8/22/2019 10:50:50 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 1:17:34 PM
Surr: BFB	98.3	77.4-118		%Rec	1	8/21/2019 1:17:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	8/21/2019 1:17:34 PM
Toluene	ND	0.048		mg/Kg	1	8/21/2019 1:17:34 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 1:17:34 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/21/2019 1:17:34 PM
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	8/21/2019 1:17:34 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	150	60		mg/Kg	20	8/22/2019 12:50:07 PM

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 Quanitative 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 Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 26, 2019

Dennis Williams

Vertex Resource Group Ltd.
213 S. Mesa St
Carlsbad, NM 88220
TEL:
FAX:

RE: Rick Declard 25 28 4 OrderNo.: 1908B23

Dear Dennis Williams:

Hall Environmental Analysis Laboratory received 25 sample(s) on 8/20/2019 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: BG19-01 0'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:00:00 AM
Lab ID: 1908B23-001 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	59		mg/Kg	20	8/21/2019 10:37:03 PM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/21/2019 9:37:40 AM	46939
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 9:37:40 AM	46939
Surr: DNOP	90.3	70-130		%Rec	1	8/21/2019 9:37:40 AM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 11:58:00 AM	46922
Surr: BFB	90.1	77.4-118		%Rec	1	8/21/2019 11:58:00 AM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 11:58:00 AM	46922
Toluene	ND	0.048		mg/Kg	1	8/21/2019 11:58:00 AM	46922
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 11:58:00 AM	46922
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 11:58:00 AM	46922
Surr: 4-Bromofluorobenzene	91.6	80-120		%Rec	1	8/21/2019 11:58:00 AM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: BG19-01 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:05:00 AM
Lab ID: 1908B23-002 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	8/21/2019 10:49:28 PM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/21/2019 10:49:45 AM	46939
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 10:49:45 AM	46939
Surr: DNOP	91.2	70-130		%Rec	1	8/21/2019 10:49:45 AM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 1:31:49 PM	46922
Surr: BFB	90.2	77.4-118		%Rec	1	8/21/2019 1:31:49 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 1:31:49 PM	46922
Toluene	ND	0.048		mg/Kg	1	8/21/2019 1:31:49 PM	46922
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 1:31:49 PM	46922
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 1:31:49 PM	46922
Surr: 4-Bromofluorobenzene	91.1	80-120		%Rec	1	8/21/2019 1:31:49 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: BG19-01 2'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:10:00 AM
Lab ID: 1908B23-003 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	8/21/2019 11:51:31 PM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	8/21/2019 11:13:54 AM	46939
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/21/2019 11:13:54 AM	46939
Surr: DNOP	92.1	70-130		%Rec	1	8/21/2019 11:13:54 AM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/21/2019 2:42:24 PM	46922
Surr: BFB	91.3	77.4-118		%Rec	1	8/21/2019 2:42:24 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 2:42:24 PM	46922
Toluene	ND	0.049		mg/Kg	1	8/21/2019 2:42:24 PM	46922
Ethylbenzene	ND	0.049		mg/Kg	1	8/21/2019 2:42:24 PM	46922
Xylenes, Total	ND	0.098		mg/Kg	1	8/21/2019 2:42:24 PM	46922
Surr: 4-Bromofluorobenzene	92.2	80-120		%Rec	1	8/21/2019 2:42:24 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-01 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:15:00 AM
Lab ID: 1908B23-004 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	120	60		mg/Kg	20	8/22/2019 12:03:56 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/21/2019 11:38:00 AM	46939
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/21/2019 11:38:00 AM	46939
Surr: DNOP	93.9	70-130		%Rec	1	8/21/2019 11:38:00 AM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/21/2019 3:05:59 PM	46922
Surr: BFB	95.9	77.4-118		%Rec	1	8/21/2019 3:05:59 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/21/2019 3:05:59 PM	46922
Toluene	ND	0.050		mg/Kg	1	8/21/2019 3:05:59 PM	46922
Ethylbenzene	ND	0.050		mg/Kg	1	8/21/2019 3:05:59 PM	46922
Xylenes, Total	ND	0.10		mg/Kg	1	8/21/2019 3:05:59 PM	46922
Surr: 4-Bromofluorobenzene	97.2	80-120		%Rec	1	8/21/2019 3:05:59 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-02 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:20:00 AM
Lab ID: 1908B23-005 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	980	60		mg/Kg	20	8/22/2019 12:16:20 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/21/2019 12:02:09 PM	46939
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/21/2019 12:02:09 PM	46939
Surr: DNOP	93.8	70-130		%Rec	1	8/21/2019 12:02:09 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/21/2019 3:29:32 PM	46922
Surr: BFB	91.3	77.4-118		%Rec	1	8/21/2019 3:29:32 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/21/2019 3:29:32 PM	46922
Toluene	ND	0.050		mg/Kg	1	8/21/2019 3:29:32 PM	46922
Ethylbenzene	ND	0.050		mg/Kg	1	8/21/2019 3:29:32 PM	46922
Xylenes, Total	ND	0.10		mg/Kg	1	8/21/2019 3:29:32 PM	46922
Surr: 4-Bromofluorobenzene	91.8	80-120		%Rec	1	8/21/2019 3:29:32 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-03 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:25:00 AM
Lab ID: 1908B23-006 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	700	60		mg/Kg	20	8/22/2019 12:28:44 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/21/2019 12:26:10 PM	46939
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/21/2019 12:26:10 PM	46939
Surr: DNOP	95.0	70-130		%Rec	1	8/21/2019 12:26:10 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/21/2019 5:03:29 PM	46922
Surr: BFB	93.6	77.4-118		%Rec	1	8/21/2019 5:03:29 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/21/2019 5:03:29 PM	46922
Toluene	ND	0.050		mg/Kg	1	8/21/2019 5:03:29 PM	46922
Ethylbenzene	ND	0.050		mg/Kg	1	8/21/2019 5:03:29 PM	46922
Xylenes, Total	ND	0.10		mg/Kg	1	8/21/2019 5:03:29 PM	46922
Surr: 4-Bromofluorobenzene	94.5	80-120		%Rec	1	8/21/2019 5:03:29 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-04 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:30:00 AM
Lab ID: 1908B23-007 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	150	60		mg/Kg	20	8/22/2019 12:41:09 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	8/21/2019 12:50:06 PM	46939
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/21/2019 12:50:06 PM	46939
Surr: DNOP	96.0	70-130		%Rec	1	8/21/2019 12:50:06 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 5:26:56 PM	46922
Surr: BFB	97.8	77.4-118		%Rec	1	8/21/2019 5:26:56 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 5:26:56 PM	46922
Toluene	ND	0.048		mg/Kg	1	8/21/2019 5:26:56 PM	46922
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 5:26:56 PM	46922
Xylenes, Total	ND	0.097		mg/Kg	1	8/21/2019 5:26:56 PM	46922
Surr: 4-Bromofluorobenzene	98.9	80-120		%Rec	1	8/21/2019 5:26:56 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-05 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:35:00 AM
Lab ID: 1908B23-008 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	330	60		mg/Kg	20	8/22/2019 12:53:33 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/21/2019 1:14:05 PM	46939
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 1:14:05 PM	46939
Surr: DNOP	94.2	70-130		%Rec	1	8/21/2019 1:14:05 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 5:50:23 PM	46922
Surr: BFB	90.8	77.4-118		%Rec	1	8/21/2019 5:50:23 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 5:50:23 PM	46922
Toluene	ND	0.048		mg/Kg	1	8/21/2019 5:50:23 PM	46922
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 5:50:23 PM	46922
Xylenes, Total	ND	0.095		mg/Kg	1	8/21/2019 5:50:23 PM	46922
Surr: 4-Bromofluorobenzene	91.9	80-120		%Rec	1	8/21/2019 5:50:23 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-06 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:40:00 AM
Lab ID: 1908B23-009 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	220	60		mg/Kg	20	8/22/2019 1:05:57 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/21/2019 1:38:05 PM	46939
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/21/2019 1:38:05 PM	46939
Surr: DNOP	94.8	70-130		%Rec	1	8/21/2019 1:38:05 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 6:13:56 PM	46922
Surr: BFB	88.8	77.4-118		%Rec	1	8/21/2019 6:13:56 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 6:13:56 PM	46922
Toluene	ND	0.048		mg/Kg	1	8/21/2019 6:13:56 PM	46922
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 6:13:56 PM	46922
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 6:13:56 PM	46922
Surr: 4-Bromofluorobenzene	89.4	80-120		%Rec	1	8/21/2019 6:13:56 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-07 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:45:00 AM
Lab ID: 1908B23-010 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	340	59		mg/Kg	20	8/22/2019 1:18:21 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/21/2019 2:02:07 PM	46939
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/21/2019 2:02:07 PM	46939
Surr: DNOP	97.8	70-130		%Rec	1	8/21/2019 2:02:07 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 6:37:31 PM	46922
Surr: BFB	89.9	77.4-118		%Rec	1	8/21/2019 6:37:31 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 6:37:31 PM	46922
Toluene	ND	0.048		mg/Kg	1	8/21/2019 6:37:31 PM	46922
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 6:37:31 PM	46922
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 6:37:31 PM	46922
Surr: 4-Bromofluorobenzene	90.9	80-120		%Rec	1	8/21/2019 6:37:31 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-08 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:50:00 AM
Lab ID: 1908B23-011 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	330	60		mg/Kg	20	8/22/2019 1:55:34 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/21/2019 2:26:12 PM	46939
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/21/2019 2:26:12 PM	46939
Surr: DNOP	96.3	70-130		%Rec	1	8/21/2019 2:26:12 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 7:01:03 PM	46922
Surr: BFB	90.0	77.4-118		%Rec	1	8/21/2019 7:01:03 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 7:01:03 PM	46922
Toluene	ND	0.047		mg/Kg	1	8/21/2019 7:01:03 PM	46922
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 7:01:03 PM	46922
Xylenes, Total	ND	0.095		mg/Kg	1	8/21/2019 7:01:03 PM	46922
Surr: 4-Bromofluorobenzene	90.5	80-120		%Rec	1	8/21/2019 7:01:03 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-09 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 10:55:00 AM
Lab ID: 1908B23-012 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	100	60		mg/Kg	20	8/22/2019 2:07:59 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/21/2019 2:50:12 PM	46939
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/21/2019 2:50:12 PM	46939
Surr: DNOP	96.3	70-130		%Rec	1	8/21/2019 2:50:12 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/21/2019 7:24:33 PM	46922
Surr: BFB	95.1	77.4-118		%Rec	1	8/21/2019 7:24:33 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 7:24:33 PM	46922
Toluene	ND	0.049		mg/Kg	1	8/21/2019 7:24:33 PM	46922
Ethylbenzene	ND	0.049		mg/Kg	1	8/21/2019 7:24:33 PM	46922
Xylenes, Total	ND	0.098		mg/Kg	1	8/21/2019 7:24:33 PM	46922
Surr: 4-Bromofluorobenzene	96.1	80-120		%Rec	1	8/21/2019 7:24:33 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-10 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:00:00 AM
Lab ID: 1908B23-013 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	240	60		mg/Kg	20	8/22/2019 2:45:13 AM	46952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/21/2019 3:14:10 PM	46939
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/21/2019 3:14:10 PM	46939
Surr: DNOP	97.3	70-130		%Rec	1	8/21/2019 3:14:10 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 7:48:02 PM	46922
Surr: BFB	90.1	77.4-118		%Rec	1	8/21/2019 7:48:02 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 7:48:02 PM	46922
Toluene	ND	0.048		mg/Kg	1	8/21/2019 7:48:02 PM	46922
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 7:48:02 PM	46922
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 7:48:02 PM	46922
Surr: 4-Bromofluorobenzene	90.3	80-120		%Rec	1	8/21/2019 7:48:02 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-11 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:05:00 AM
Lab ID: 1908B23-014 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	570	60		mg/Kg	20	8/22/2019 9:44:56 AM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/21/2019 3:38:12 PM	46939
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 3:38:12 PM	46939
Surr: DNOP	97.8	70-130		%Rec	1	8/21/2019 3:38:12 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 8:11:26 PM	46922
Surr: BFB	87.7	77.4-118		%Rec	1	8/21/2019 8:11:26 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 8:11:26 PM	46922
Toluene	ND	0.048		mg/Kg	1	8/21/2019 8:11:26 PM	46922
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 8:11:26 PM	46922
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 8:11:26 PM	46922
Surr: 4-Bromofluorobenzene	88.4	80-120		%Rec	1	8/21/2019 8:11:26 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-12 1.0'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:10:00 AM
Lab ID: 1908B23-015 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	760	60		mg/Kg	20	8/22/2019 9:57:17 AM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/21/2019 4:02:20 PM	46939
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/21/2019 4:02:20 PM	46939
Surr: DNOP	99.0	70-130		%Rec	1	8/21/2019 4:02:20 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/21/2019 8:34:51 PM	46922
Surr: BFB	88.3	77.4-118		%Rec	1	8/21/2019 8:34:51 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/21/2019 8:34:51 PM	46922
Toluene	ND	0.050		mg/Kg	1	8/21/2019 8:34:51 PM	46922
Ethylbenzene	ND	0.050		mg/Kg	1	8/21/2019 8:34:51 PM	46922
Xylenes, Total	ND	0.10		mg/Kg	1	8/21/2019 8:34:51 PM	46922
Surr: 4-Bromofluorobenzene	89.0	80-120		%Rec	1	8/21/2019 8:34:51 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-13 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:15:00 AM
Lab ID: 1908B23-016 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	450	60		mg/Kg	20	8/22/2019 10:34:20 AM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/21/2019 4:26:25 PM	46939
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/21/2019 4:26:25 PM	46939
Surr: DNOP	99.7	70-130		%Rec	1	8/21/2019 4:26:25 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/21/2019 10:08:18 PM	46922
Surr: BFB	89.4	77.4-118		%Rec	1	8/21/2019 10:08:18 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/21/2019 10:08:18 PM	46922
Toluene	ND	0.049		mg/Kg	1	8/21/2019 10:08:18 PM	46922
Ethylbenzene	ND	0.049		mg/Kg	1	8/21/2019 10:08:18 PM	46922
Xylenes, Total	ND	0.098		mg/Kg	1	8/21/2019 10:08:18 PM	46922
Surr: 4-Bromofluorobenzene	91.1	80-120		%Rec	1	8/21/2019 10:08:18 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-14 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:20:00 AM
Lab ID: 1908B23-017 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	830	60		mg/Kg	20	8/22/2019 11:11:21 AM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/21/2019 4:50:33 PM	46939
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/21/2019 4:50:33 PM	46939
Surr: DNOP	94.7	70-130		%Rec	1	8/21/2019 4:50:33 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 10:32:10 PM	46922
Surr: BFB	98.1	77.4-118		%Rec	1	8/21/2019 10:32:10 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 10:32:10 PM	46922
Toluene	ND	0.048		mg/Kg	1	8/21/2019 10:32:10 PM	46922
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 10:32:10 PM	46922
Xylenes, Total	ND	0.096		mg/Kg	1	8/21/2019 10:32:10 PM	46922
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	8/21/2019 10:32:10 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-15 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:25:00 AM
Lab ID: 1908B23-018 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	630	60		mg/Kg	20	8/22/2019 11:23:42 AM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/21/2019 5:14:36 PM	46939
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/21/2019 5:14:36 PM	46939
Surr: DNOP	97.3	70-130		%Rec	1	8/21/2019 5:14:36 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/21/2019 10:55:45 PM	46922
Surr: BFB	99.9	77.4-118		%Rec	1	8/21/2019 10:55:45 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	8/21/2019 10:55:45 PM	46922
Toluene	ND	0.046		mg/Kg	1	8/21/2019 10:55:45 PM	46922
Ethylbenzene	ND	0.046		mg/Kg	1	8/21/2019 10:55:45 PM	46922
Xylenes, Total	ND	0.092		mg/Kg	1	8/21/2019 10:55:45 PM	46922
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	8/21/2019 10:55:45 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-16 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:30:00 AM
Lab ID: 1908B23-019 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	700	60		mg/Kg	20	8/22/2019 11:36:03 AM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/21/2019 5:38:51 PM	46939
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/21/2019 5:38:51 PM	46939
Surr: DNOP	92.4	70-130		%Rec	1	8/21/2019 5:38:51 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 11:19:14 PM	46922
Surr: BFB	94.1	77.4-118		%Rec	1	8/21/2019 11:19:14 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 11:19:14 PM	46922
Toluene	ND	0.047		mg/Kg	1	8/21/2019 11:19:14 PM	46922
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 11:19:14 PM	46922
Xylenes, Total	ND	0.094		mg/Kg	1	8/21/2019 11:19:14 PM	46922
Surr: 4-Bromofluorobenzene	94.5	80-120		%Rec	1	8/21/2019 11:19:14 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-17 1'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:35:00 AM
Lab ID: 1908B23-020 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	820	60		mg/Kg	20	8/22/2019 11:48:24 AM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/21/2019 6:03:02 PM	46939
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/21/2019 6:03:02 PM	46939
Surr: DNOP	94.7	70-130		%Rec	1	8/21/2019 6:03:02 PM	46939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 11:42:44 PM	46922
Surr: BFB	92.5	77.4-118		%Rec	1	8/21/2019 11:42:44 PM	46922
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 11:42:44 PM	46922
Toluene	ND	0.047		mg/Kg	1	8/21/2019 11:42:44 PM	46922
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 11:42:44 PM	46922
Xylenes, Total	ND	0.095		mg/Kg	1	8/21/2019 11:42:44 PM	46922
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	1	8/21/2019 11:42:44 PM	46922

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-18 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:40:00 AM
Lab ID: 1908B23-021 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	4200	150		mg/Kg	50	8/23/2019 3:45:52 PM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/22/2019 9:15:04 AM	46940
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/22/2019 9:15:04 AM	46940
Surr: DNOP	77.7	70-130		%Rec	1	8/22/2019 9:15:04 AM	46940
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 10:14:46 AM	46923
Surr: BFB	99.0	77.4-118		%Rec	1	8/21/2019 10:14:46 AM	46923
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 10:14:46 AM	46923
Toluene	ND	0.047		mg/Kg	1	8/21/2019 10:14:46 AM	46923
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 10:14:46 AM	46923
Xylenes, Total	ND	0.095		mg/Kg	1	8/21/2019 10:14:46 AM	46923
Surr: 4-Bromofluorobenzene	89.7	80-120		%Rec	1	8/21/2019 10:14:46 AM	46923

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-19 3'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:45:00 AM
Lab ID: 1908B23-022 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	1800	60		mg/Kg	20	8/22/2019 12:13:06 PM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	8/22/2019 9:39:00 AM	46940
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/22/2019 9:39:00 AM	46940
Surr: DNOP	105	70-130		%Rec	1	8/22/2019 9:39:00 AM	46940
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 11:23:20 AM	46923
Surr: BFB	96.3	77.4-118		%Rec	1	8/21/2019 11:23:20 AM	46923
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 11:23:20 AM	46923
Toluene	ND	0.048		mg/Kg	1	8/21/2019 11:23:20 AM	46923
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 11:23:20 AM	46923
Xylenes, Total	ND	0.097		mg/Kg	1	8/21/2019 11:23:20 AM	46923
Surr: 4-Bromofluorobenzene	92.4	80-120		%Rec	1	8/21/2019 11:23:20 AM	46923

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-20 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:50:00 AM
Lab ID: 1908B23-023 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	3100	150		mg/Kg	50	8/23/2019 3:58:17 PM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	32	9.7		mg/Kg	1	8/22/2019 10:02:52 AM	46940
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/22/2019 10:02:52 AM	46940
Surr: DNOP	105	70-130		%Rec	1	8/22/2019 10:02:52 AM	46940
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/21/2019 12:31:48 PM	46923
Surr: BFB	98.2	77.4-118		%Rec	1	8/21/2019 12:31:48 PM	46923
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	8/21/2019 12:31:48 PM	46923
Toluene	ND	0.047		mg/Kg	1	8/21/2019 12:31:48 PM	46923
Ethylbenzene	ND	0.047		mg/Kg	1	8/21/2019 12:31:48 PM	46923
Xylenes, Total	ND	0.094		mg/Kg	1	8/21/2019 12:31:48 PM	46923
Surr: 4-Bromofluorobenzene	92.6	80-120		%Rec	1	8/21/2019 12:31:48 PM	46923

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-21 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 11:55:00 AM
Lab ID: 1908B23-024 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	870	60		mg/Kg	20	8/22/2019 12:37:46 PM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/22/2019 10:26:49 AM	46940
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/22/2019 10:26:49 AM	46940
Surr: DNOP	100	70-130		%Rec	1	8/22/2019 10:26:49 AM	46940
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/21/2019 12:54:41 PM	46923
Surr: BFB	97.4	77.4-118		%Rec	1	8/21/2019 12:54:41 PM	46923
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/21/2019 12:54:41 PM	46923
Toluene	ND	0.049		mg/Kg	1	8/21/2019 12:54:41 PM	46923
Ethylbenzene	ND	0.049		mg/Kg	1	8/21/2019 12:54:41 PM	46923
Xylenes, Total	ND	0.098		mg/Kg	1	8/21/2019 12:54:41 PM	46923
Surr: 4-Bromofluorobenzene	90.8	80-120		%Rec	1	8/21/2019 12:54:41 PM	46923

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base 19-22 0.5'
Project: Rick Declard 25 28 4
Collection Date: 8/19/2019 12:00:00 PM
Lab ID: 1908B23-025 **Matrix:** SOIL
Received Date: 8/20/2019 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	150	60		mg/Kg	20	8/22/2019 12:50:07 PM	46964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/22/2019 10:50:50 AM	46940
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/22/2019 10:50:50 AM	46940
Surr: DNOP	48.4	70-130	S	%Rec	1	8/22/2019 10:50:50 AM	46940
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/21/2019 1:17:34 PM	46923
Surr: BFB	98.3	77.4-118		%Rec	1	8/21/2019 1:17:34 PM	46923
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/21/2019 1:17:34 PM	46923
Toluene	ND	0.048		mg/Kg	1	8/21/2019 1:17:34 PM	46923
Ethylbenzene	ND	0.048		mg/Kg	1	8/21/2019 1:17:34 PM	46923
Xylenes, Total	ND	0.097		mg/Kg	1	8/21/2019 1:17:34 PM	46923
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	8/21/2019 1:17:34 PM	46923

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1908B23**

26-Aug-19

Client: Vertex Resource Group Ltd.

Project: Rick Declard 25 28 4

Sample ID: **MB-46952**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **46952**	RunNo: **62313**							
Prep Date: **8/21/2019**	Analysis Date: **8/21/2019**	SeqNo: **2117488**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-46952**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **46952**	RunNo: **62313**							
Prep Date: **8/21/2019**	Analysis Date: **8/21/2019**	SeqNo: **2117489**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.2	90	110			

Sample ID: **MB-46964**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **46964**	RunNo: **62353**							
Prep Date: **8/21/2019**	Analysis Date: **8/22/2019**	SeqNo: **2119648**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-46964**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **46964**	RunNo: **62353**							
Prep Date: **8/21/2019**	Analysis Date: **8/22/2019**	SeqNo: **2119649**	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 Quanitative 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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908B23**
26-Aug-19

Client: Vertex Resource Group Ltd.
Project: Rick Declard 25 28 4

Sample ID: **MB-46939** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **46939** RunNo: **62299**
Prep Date: **8/21/2019** Analysis Date: **8/21/2019** SeqNo: **2117026** 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		93.3	70	130			

Sample ID: **LCS-46939** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **46939** RunNo: **62299**
Prep Date: **8/21/2019** Analysis Date: **8/21/2019** SeqNo: **2117027** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.9	63.9	124			
Surr: DNOP	4.3		5.000		86.6	70	130			

Sample ID: **1908B23-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BG19-01 0'** Batch ID: **46939** RunNo: **62299**
Prep Date: **8/21/2019** Analysis Date: **8/21/2019** SeqNo: **2117029** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.6	47.85	0	88.8	57	142			
Surr: DNOP	4.1		4.785		84.7	70	130			

Sample ID: **1908B23-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BG19-01 0'** Batch ID: **46939** RunNo: **62299**
Prep Date: **8/21/2019** Analysis Date: **8/21/2019** SeqNo: **2117030** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.8	49.02	0	93.1	57	142	7.11	20	
Surr: DNOP	4.1		4.902		84.6	70	130	0	0	

Sample ID: **MB-46940** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **46940** RunNo: **62330**
Prep Date: **8/21/2019** Analysis Date: **8/22/2019** SeqNo: **2118181** 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		105	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 Quanitative 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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908B23**
26-Aug-19

Client: Vertex Resource Group Ltd.
Project: Rick Declard 25 28 4

Sample ID: **LCS-46940** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **46940** RunNo: **62330**
Prep Date: **8/21/2019** Analysis Date: **8/22/2019** SeqNo: **2118182** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.5	63.9	124			
Surr: DNOP	4.4		5.000		88.6	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 Quanitative 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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1908B23**

26-Aug-19

Client: Vertex Resource Group Ltd.

Project: Rick Declard 25 28 4

Sample ID: **MB-46923** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **46923** RunNo: **62310**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117223** 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	1000		1000		101	77.4	118			

Sample ID: **LCS-46923** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **46923** RunNo: **62310**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117224** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.6	80	120			
Surr: BFB	1200		1000		116	77.4	118			

Sample ID: **1908B23-021AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **Base 19-18 0.5'** Batch ID: **46923** RunNo: **62310**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117226** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	24.11	0	104	69.1	142			
Surr: BFB	1100		964.3		118	77.4	118			

Sample ID: **1908B23-021AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **Base 19-18 0.5'** Batch ID: **46923** RunNo: **62310**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117227** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.32	0	104	69.1	142	0.910	20	
Surr: BFB	1100		972.8		116	77.4	118	0	0	

Sample ID: **MB-46922** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **46922** RunNo: **62309**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117309** 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	920		1000		91.6	77.4	118			

Sample ID: **LCS-46922** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **46922** RunNo: **62309**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117310** Units: **mg/Kg**

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1908B23**

26-Aug-19

Client: Vertex Resource Group Ltd.

Project: Rick Declard 25 28 4

Sample ID: **LCS-46922** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **46922** RunNo: **62309**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117310** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.1	80	120			
Surr: BFB	1000		1000		100	77.4	118			

Sample ID: **1908B23-001AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **BG19-01 0'** Batch ID: **46922** RunNo: **62309**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117312** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.6	23.21	0	92.5	69.1	142			
Surr: BFB	950		928.5		103	77.4	118			

Sample ID: **1908B23-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **BG19-01 0'** Batch ID: **46922** RunNo: **62309**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117313** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.65	0	91.7	69.1	142	1.05	20	
Surr: BFB	1000		946.1		107	77.4	118	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 Quanitative 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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1908B23**

26-Aug-19

Client: Vertex Resource Group Ltd.

Project: Rick Declard 25 28 4

Sample ID: **MB-46923** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **46923** RunNo: **62310**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117256** 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	0.95		1.000		94.9	80	120			

Sample ID: **LCS-46923** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **46923** RunNo: **62310**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117257** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.3	80	120			
Toluene	0.96	0.050	1.000	0	96.5	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: **1908B23-022AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **Base 19-19 3'** Batch ID: **46923** RunNo: **62310**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117260** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9588	0	101	76	123			
Toluene	1.0	0.048	0.9588	0	104	80.3	127			
Ethylbenzene	1.0	0.048	0.9588	0	108	80.2	131			
Xylenes, Total	3.1	0.096	2.876	0	107	78	133			
Surr: 4-Bromofluorobenzene	0.95		0.9588		99.2	80	120			

Sample ID: **1908B23-022AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **Base 19-19 3'** Batch ID: **46923** RunNo: **62310**

Prep Date: **8/20/2019** Analysis Date: **8/21/2019** SeqNo: **2117261** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.024	0.9737	0	98.9	76	123	0.264	20	
Toluene	0.99	0.049	0.9737	0	102	80.3	127	0.593	20	
Ethylbenzene	1.0	0.049	0.9737	0	106	80.2	131	0.234	20	
Xylenes, Total	3.1	0.097	2.921	0	105	78	133	0.238	20	
Surr: 4-Bromofluorobenzene	0.99		0.9737		102	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 Quanitative 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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1908B23**

26-Aug-19

Client: Vertex Resource Group Ltd.

Project: Rick Declard 25 28 4

Sample ID: **MB-46922**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **46922**	RunNo: **62309**
Prep Date: **8/20/2019**	Analysis Date: **8/21/2019**	SeqNo: **2117349** 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	0.94		1.000		93.6	80	120			

Sample ID: **LCS-46922**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **46922**	RunNo: **62309**
Prep Date: **8/20/2019**	Analysis Date: **8/21/2019**	SeqNo: **2117350** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.8	80	120			
Toluene	0.98	0.050	1.000	0	97.6	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.4	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.3	80	120			

Sample ID: **1908B23-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BG19-01 1'**	Batch ID: **46922**	RunNo: **62309**
Prep Date: **8/20/2019**	Analysis Date: **8/21/2019**	SeqNo: **2117353** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9643	0	101	76	123			
Toluene	1.0	0.048	0.9643	0.009213	105	80.3	127			
Ethylbenzene	1.0	0.048	0.9643	0	106	80.2	131			
Xylenes, Total	3.1	0.096	2.893	0	107	78	133			
Surr: 4-Bromofluorobenzene	0.91		0.9643		94.2	80	120			

Sample ID: **1908B23-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BG19-01 1'**	Batch ID: **46922**	RunNo: **62309**
Prep Date: **8/20/2019**	Analysis Date: **8/21/2019**	SeqNo: **2117354** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.024	0.9533	0	102	76	123	0.265	20	
Toluene	1.0	0.048	0.9533	0.009213	106	80.3	127	0.264	20	
Ethylbenzene	1.0	0.048	0.9533	0	107	80.2	131	0.353	20	
Xylenes, Total	3.1	0.095	2.860	0	108	78	133	0.711	20	
Surr: 4-Bromofluorobenzene	0.88		0.9533		92.4	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 Quanitative 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 Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: VERTEX CARLSBAD Work Order Number: 1908B23 RcptNo: 1

Received By: Daniel Marquez 8/20/2019 8:55:00 AM

Completed By: Yazmine Garduno 8/20/2019 10:10:28 AM

Reviewed By: LB 8/20/19

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: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 8/20/19

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	4.8	Good				
2	3.4	Good				
3	4.2	Good				

Chain-of-Custody Record

Client: Vertex Resource Group LTD

Marathon Oil

Mailing Address:

213 S Mesa Street, Carlsbad NM

Phone #: 575 361 1137

email or Fax#: dwilliams@vertex.ca

QA/QC Package: permian@vertex.ca

☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 48 hours ~~24 hours~~ SJ

☐ Standard ☒ Rush

Project Name: Rick Declared 25-28-4

Project #: 19E-00614

Project Manager: Dennis Williams

Sampler: Austin Harris

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1908823	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	$Cl, F, Br, NO_3, NO_2, PO_4, SO_4$	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
08/19	10:00	Soil	BG19-01 0'	glass Jar	ICE	-001	X	X					X			
	10:05		BG19-01 1'			-002	X	X					X			
	10:10		BG19-01 2'			-003	X	X					X			
	10:15		Base 19-01 0.5'			-004	X	X					X			
	10:20		Base 19-02 0.5'			-005	X	X					X			
	10:25		Base 19-03 0.5'			-006	X	X					X			
	10:30		Base 19-04 0.5'			-007	X	X					X			
	10:35		Base 19-05 0.5'			-008	X	X					X			
	10:40		Base 19-06 0.5'			-009	X	X					X			
	10:45		Base 19-07 0.5'			-010	X	X					X			
	10:50		Base 19-08 0.5'			-011	X	X					X			
	10:55		Base 19-09 0.5'			-012	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
08/19	11:00	Austin Harris	Dennis Williams		08/19	2:00 PM
8/19/19	19W		Courier		8/20/19	8:55

Remarks: Temp.
1) 4.5 + 0.3 = 4.8°c
2) 3.1 + 0.3 = 3.4°c
3) 3.9 + 0.3 = 4.2°c

Chain-of-Custody Record

Client: Vertex Resource group LTD

Marathon 01

Mailing Address:

213 S Mesa ST Carlsbad, NM, 88220

Phone #: 575 361 1137

email or Fax#: dwilliams@vertex.ca

QA/QC Package: Permian@vertex.ca

☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 48 hour 24 hour ST

☐ Standard ☑ Rush

Project Name: Rick Deckard 25 28 4

Project #: 19E-00614

Project Manager: Dennis Williams

Sampler: Austin Harris

On Ice: ☑ Yes ☐ No

# of Coolers: ~~Remarks~~ 3

Cooler Temp(including CF): Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1908823	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
08/19	11:00	Soil	Base 19-10 0.5'	Glass Jar	Ice	-013	X	X					X			
	11:05		Base 19-11 1'			-014	X	X					X			
	11:10		Base 19-12 1.0'			-015	X	X					X			
	11:15		Base 19-13 1'			-016	X	X					X			
	11:20		Base 19-14 1'			-017	X	X					X			
	11:25		Base 19-15 1'			-018	X	X					X			
	11:30		Base 19-16 0.5'			-019	X	X					X			
	11:35		Base 19-17 1'			-020	X	X					X			
	11:40		Base 19-18 0.5'			-021	X	X					X			
	11:45		Base 19-19 3'			-022	X	X					X			
	11:50		Base 19-20 0.5'			-023	X	X					X			
	11:55		Base 19-21 0.5'			-024	X	X					X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
08/19	12:00 PM	Austin Harris	Dennis Williams		8/19	2:00 PM
8/19/19	1900		Courier		8/20/19	8:55

Remarks: Temp 1) 4.5 + 0.3 = 4.8°C 2) 3.1 + 0.3

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.

Chain-of-Custody Record

Client: Vertex Resource Group
Marathon Oil
Mailing Address:
213 S Mesa S Carlsbad NM 88220
Phone #: 575 361 1137
email or Fax#: dwilliams@vertex.ca
QA/QC Package: Permian@vertex.ca
☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 48 hour / 24 hour ST
☐ Standard ☑ Rush
Project Name: Rick Deckard 25 28 4
Project #: 19E 00614
Project Manager: Dennis Williams
Sampler: Austin Harris
On Ice: ☑ Yes ☐ No
# of Coolers: 3
Cooler Temp(including CF): Remarks (°C)

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1908823
08/19	12:00	Soil	Base 19-22 0.5'	Glass Jar	Ice	-025

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
08/19	12:00	Austin Harris	Dennis Williams		08/19	2100
8/19/19	1910		Dan Courier		8/20/19	8:55

Remarks:
Temp.
1) 4.5+0.3=4.8°C
2) ~~3.1+0.3=3.4°C~~ 3.1+0.3=3.4°C
3) 3.9+0.3=4.2°C

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 04, 2019

Dennis Williams

Vertex Resource Group Ltd.
213 S. Mesa St
Carlsbad, NM 88220
TEL:
FAX

RE: Rick Deckard State 25 28 4 WA 2H OrderNo.: 1908F01

Dear Dennis Williams:

Hall Environmental Analysis Laboratory received 11 sample(s) on 8/27/2019 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base19-02 1.0'
Project: Rick Deckard State 25 28 4 WA 2H
Collection Date: 8/24/2019 9:00:00 AM
Lab ID: 1908F01-001
Matrix: MEOH (SOIL)
Received Date: 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/27/2019 2:26:38 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/27/2019 2:26:38 PM
Surr: DNOP	115	70-130		%Rec	1	8/27/2019 2:26:38 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	8/27/2019 8:12:17 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.021		mg/Kg	1	8/27/2019 10:45:23 PM
Toluene	ND	0.042		mg/Kg	1	8/27/2019 10:45:23 PM
Ethylbenzene	ND	0.042		mg/Kg	1	8/27/2019 10:45:23 PM
Xylenes, Total	ND	0.083		mg/Kg	1	8/27/2019 10:45:23 PM
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%Rec	1	8/27/2019 10:45:23 PM
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	8/27/2019 10:45:23 PM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/27/2019 10:45:23 PM
Surr: Toluene-d8	99.8	70-130		%Rec	1	8/27/2019 10:45:23 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	8/27/2019 10:45:23 PM
Surr: BFB	99.4	70-130		%Rec	1	8/27/2019 10:45:23 PM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. **Client Sample ID:** Base19-03 1.0'
Project: Rick Deckard State 25 28 4 WA 2H **Collection Date:** 8/24/2019 9:15:00 AM
Lab ID: 1908F01-002 **Matrix:** MEOH (SOIL) **Received Date:** 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/27/2019 2:51:00 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2019 2:51:00 PM
Surr: DNOP	104	70-130		%Rec	1	8/27/2019 2:51:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	8/27/2019 8:49:30 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.017		mg/Kg	1	8/28/2019 12:11:59 AM
Toluene	ND	0.034		mg/Kg	1	8/28/2019 12:11:59 AM
Ethylbenzene	ND	0.034		mg/Kg	1	8/28/2019 12:11:59 AM
Xylenes, Total	ND	0.068		mg/Kg	1	8/28/2019 12:11:59 AM
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%Rec	1	8/28/2019 12:11:59 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	8/28/2019 12:11:59 AM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/28/2019 12:11:59 AM
Surr: Toluene-d8	98.8	70-130		%Rec	1	8/28/2019 12:11:59 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	8/28/2019 12:11:59 AM
Surr: BFB	100	70-130		%Rec	1	8/28/2019 12:11:59 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. **Client Sample ID:** Base19-12 1.5'
Project: Rick Deckard State 25 28 4 WA 2H **Collection Date:** 8/24/2019 9:30:00 AM
Lab ID: 1908F01-003 **Matrix:** MEOH (SOIL) **Received Date:** 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/27/2019 3:15:33 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/27/2019 3:15:33 PM
Surr: DNOP	103	70-130		%Rec	1	8/27/2019 3:15:33 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	8/27/2019 9:01:55 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.018		mg/Kg	1	8/28/2019 1:38:33 AM
Toluene	ND	0.035		mg/Kg	1	8/28/2019 1:38:33 AM
Ethylbenzene	ND	0.035		mg/Kg	1	8/28/2019 1:38:33 AM
Xylenes, Total	ND	0.070		mg/Kg	1	8/28/2019 1:38:33 AM
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%Rec	1	8/28/2019 1:38:33 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	8/28/2019 1:38:33 AM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/28/2019 1:38:33 AM
Surr: Toluene-d8	101	70-130		%Rec	1	8/28/2019 1:38:33 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/28/2019 1:38:33 AM
Surr: BFB	102	70-130		%Rec	1	8/28/2019 1:38:33 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. **Client Sample ID:** Base19-14 1.5'
Project: Rick Deckard State 25 28 4 WA 2H **Collection Date:** 8/24/2019 9:45:00 AM
Lab ID: 1908F01-004 **Matrix:** MEOH (SOIL) **Received Date:** 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	8/27/2019 3:39:57 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	8/27/2019 3:39:57 PM
Surr: DNOP	102	70-130		%Rec	1	8/27/2019 3:39:57 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	270	60		mg/Kg	20	8/27/2019 9:39:08 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.018		mg/Kg	1	8/28/2019 2:07:33 AM
Toluene	ND	0.037		mg/Kg	1	8/28/2019 2:07:33 AM
Ethylbenzene	ND	0.037		mg/Kg	1	8/28/2019 2:07:33 AM
Xylenes, Total	ND	0.073		mg/Kg	1	8/28/2019 2:07:33 AM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%Rec	1	8/28/2019 2:07:33 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	8/28/2019 2:07:33 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/28/2019 2:07:33 AM
Surr: Toluene-d8	96.3	70-130		%Rec	1	8/28/2019 2:07:33 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	8/28/2019 2:07:33 AM
Surr: BFB	99.2	70-130		%Rec	1	8/28/2019 2:07:33 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. **Client Sample ID:** Base19-15 1.5'
Project: Rick Deckard State 25 28 4 WA 2H **Collection Date:** 8/24/2019 10:00:00 AM
Lab ID: 1908F01-005 **Matrix:** MEOH (SOIL) **Received Date:** 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/27/2019 4:04:31 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/27/2019 4:04:31 PM
Surr: DNOP	104	70-130		%Rec	1	8/27/2019 4:04:31 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	8/27/2019 9:51:33 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.019		mg/Kg	1	8/28/2019 2:36:27 AM
Toluene	ND	0.037		mg/Kg	1	8/28/2019 2:36:27 AM
Ethylbenzene	ND	0.037		mg/Kg	1	8/28/2019 2:36:27 AM
Xylenes, Total	ND	0.074		mg/Kg	1	8/28/2019 2:36:27 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	8/28/2019 2:36:27 AM
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	1	8/28/2019 2:36:27 AM
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/28/2019 2:36:27 AM
Surr: Toluene-d8	97.6	70-130		%Rec	1	8/28/2019 2:36:27 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	8/28/2019 2:36:27 AM
Surr: BFB	96.4	70-130		%Rec	1	8/28/2019 2:36:27 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.
Client Sample ID: Base19-16 1.0'
Project: Rick Deckard State 25 28 4 WA 2H
Collection Date: 8/24/2019 10:15:00 AM
Lab ID: 1908F01-006
Matrix: MEOH (SOIL)
Received Date: 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/27/2019 4:28:57 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/27/2019 4:28:57 PM
Surr: DNOP	106	70-130		%Rec	1	8/27/2019 4:28:57 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	8/27/2019 10:03:58 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.019		mg/Kg	1	8/28/2019 3:05:19 AM
Toluene	ND	0.038		mg/Kg	1	8/28/2019 3:05:19 AM
Ethylbenzene	ND	0.038		mg/Kg	1	8/28/2019 3:05:19 AM
Xylenes, Total	ND	0.077		mg/Kg	1	8/28/2019 3:05:19 AM
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%Rec	1	8/28/2019 3:05:19 AM
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	8/28/2019 3:05:19 AM
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/28/2019 3:05:19 AM
Surr: Toluene-d8	97.6	70-130		%Rec	1	8/28/2019 3:05:19 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	8/28/2019 3:05:19 AM
Surr: BFB	101	70-130		%Rec	1	8/28/2019 3:05:19 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. **Client Sample ID:** Base19-17 2.0'
Project: Rick Deckard State 25 28 4 WA 2H **Collection Date:** 8/24/2019 10:30:00 AM
Lab ID: 1908F01-007 **Matrix:** MEOH (SOIL) **Received Date:** 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/27/2019 4:53:31 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/27/2019 4:53:31 PM
Surr: DNOP	106	70-130		%Rec	1	8/27/2019 4:53:31 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	110	60		mg/Kg	20	8/27/2019 10:16:22 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.020		mg/Kg	1	8/28/2019 3:34:14 AM
Toluene	ND	0.040		mg/Kg	1	8/28/2019 3:34:14 AM
Ethylbenzene	ND	0.040		mg/Kg	1	8/28/2019 3:34:14 AM
Xylenes, Total	ND	0.081		mg/Kg	1	8/28/2019 3:34:14 AM
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	8/28/2019 3:34:14 AM
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	8/28/2019 3:34:14 AM
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/28/2019 3:34:14 AM
Surr: Toluene-d8	98.2	70-130		%Rec	1	8/28/2019 3:34:14 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	8/28/2019 3:34:14 AM
Surr: BFB	97.4	70-130		%Rec	1	8/28/2019 3:34:14 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. **Client Sample ID:** Base19-18 1.0'
Project: Rick Deckard State 25 28 4 WA 2H **Collection Date:** 8/24/2019 10:45:00 AM
Lab ID: 1908F01-008 **Matrix:** MEOH (SOIL) **Received Date:** 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/27/2019 5:18:02 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2019 5:18:02 PM
Surr: DNOP	103	70-130		%Rec	1	8/27/2019 5:18:02 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	280	59		mg/Kg	20	8/27/2019 10:28:47 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.022		mg/Kg	1	8/28/2019 4:03:10 AM
Toluene	ND	0.044		mg/Kg	1	8/28/2019 4:03:10 AM
Ethylbenzene	ND	0.044		mg/Kg	1	8/28/2019 4:03:10 AM
Xylenes, Total	ND	0.088		mg/Kg	1	8/28/2019 4:03:10 AM
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%Rec	1	8/28/2019 4:03:10 AM
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	8/28/2019 4:03:10 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/28/2019 4:03:10 AM
Surr: Toluene-d8	97.9	70-130		%Rec	1	8/28/2019 4:03:10 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	8/28/2019 4:03:10 AM
Surr: BFB	97.9	70-130		%Rec	1	8/28/2019 4:03:10 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. **Client Sample ID:** Base19-19 3.5'
Project: Rick Deckard State 25 28 4 WA 2H **Collection Date:** 8/24/2019 11:00:00 AM
Lab ID: 1908F01-009 **Matrix:** MEOH (SOIL) **Received Date:** 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/27/2019 5:42:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2019 5:42:28 PM
Surr: DNOP	111	70-130		%Rec	1	8/27/2019 5:42:28 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	320	60		mg/Kg	20	8/27/2019 10:41:11 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.021		mg/Kg	1	8/28/2019 4:32:08 AM
Toluene	ND	0.042		mg/Kg	1	8/28/2019 4:32:08 AM
Ethylbenzene	ND	0.042		mg/Kg	1	8/28/2019 4:32:08 AM
Xylenes, Total	ND	0.084		mg/Kg	1	8/28/2019 4:32:08 AM
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%Rec	1	8/28/2019 4:32:08 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	8/28/2019 4:32:08 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/28/2019 4:32:08 AM
Surr: Toluene-d8	97.2	70-130		%Rec	1	8/28/2019 4:32:08 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	8/28/2019 4:32:08 AM
Surr: BFB	99.7	70-130		%Rec	1	8/28/2019 4:32:08 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. **Client Sample ID:** Base19-20 1.0'
Project: Rick Deckard State 25 28 4 WA 2H **Collection Date:** 8/24/2019 11:15:00 AM
Lab ID: 1908F01-010 **Matrix:** MEOH (SOIL) **Received Date:** 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/28/2019 8:58:06 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/28/2019 8:58:06 AM
Surr: DNOP	91.1	70-130		%Rec	1	8/28/2019 8:58:06 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	160	60		mg/Kg	20	8/27/2019 11:18:25 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.020		mg/Kg	1	8/28/2019 5:01:03 AM
Toluene	ND	0.041		mg/Kg	1	8/28/2019 5:01:03 AM
Ethylbenzene	ND	0.041		mg/Kg	1	8/28/2019 5:01:03 AM
Xylenes, Total	ND	0.082		mg/Kg	1	8/28/2019 5:01:03 AM
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	8/28/2019 5:01:03 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	8/28/2019 5:01:03 AM
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/28/2019 5:01:03 AM
Surr: Toluene-d8	99.0	70-130		%Rec	1	8/28/2019 5:01:03 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	8/28/2019 5:01:03 AM
Surr: BFB	97.1	70-130		%Rec	1	8/28/2019 5:01:03 AM

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 Quanitative 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 Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. **Client Sample ID:** Base19-21 1.0'
Project: Rick Deckard State 25 28 4 WA 2H **Collection Date:** 8/24/2019 11:30:00 AM
Lab ID: 1908F01-011 **Matrix:** MEOH (SOIL) **Received Date:** 8/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/28/2019 9:22:08 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/28/2019 9:22:08 AM
Surr: DNOP	91.9	70-130		%Rec	1	8/28/2019 9:22:08 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	8/27/2019 11:30:50 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.017		mg/Kg	1	8/28/2019 5:29:49 AM
Toluene	ND	0.035		mg/Kg	1	8/28/2019 5:29:49 AM
Ethylbenzene	ND	0.035		mg/Kg	1	8/28/2019 5:29:49 AM
Xylenes, Total	ND	0.070		mg/Kg	1	8/28/2019 5:29:49 AM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%Rec	1	8/28/2019 5:29:49 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	8/28/2019 5:29:49 AM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	8/28/2019 5:29:49 AM
Surr: Toluene-d8	97.6	70-130		%Rec	1	8/28/2019 5:29:49 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/28/2019 5:29:49 AM
Surr: BFB	98.7	70-130		%Rec	1	8/28/2019 5:29:49 AM

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 Quanitative 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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908F01**
04-Sep-19

Client: Vertex Resource Group Ltd.
Project: Rick Deckard State 25 28 4 WA 2H

Sample ID: **MB-47099**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **47099**	RunNo: **62447**							
Prep Date: **8/27/2019**	Analysis Date: **8/27/2019**	SeqNo: **2124883**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-47099**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **47099**	RunNo: **62447**							
Prep Date: **8/27/2019**	Analysis Date: **8/27/2019**	SeqNo: **2124884**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative 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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908F01**
04-Sep-19

Client: Vertex Resource Group Ltd.
Project: Rick Deckard State 25 28 4 WA 2H

Sample ID: **MB-47072** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **47072** RunNo: **62439**
Prep Date: **8/27/2019** Analysis Date: **8/27/2019** SeqNo: **2123214** 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		106	70	130			

Sample ID: **LCS-47072** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **47072** RunNo: **62439**
Prep Date: **8/27/2019** Analysis Date: **8/27/2019** SeqNo: **2123215** 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	87.1	63.9	124			
Surr: DNOP	4.3		5.000		86.7	70	130			

Sample ID: **MB-47083** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **47083** RunNo: **62455**
Prep Date: **8/27/2019** Analysis Date: **8/28/2019** SeqNo: **2124830** 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	9.5		10.00		94.9	70	130			

Sample ID: **LCS-47083** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **47083** RunNo: **62455**
Prep Date: **8/27/2019** Analysis Date: **8/28/2019** SeqNo: **2124832** 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	93.6	63.9	124			
Surr: DNOP	4.6		5.000		91.9	70	130			

Sample ID: **MB-47096** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **47096** RunNo: **62455**
Prep Date: **8/27/2019** Analysis Date: **8/28/2019** SeqNo: **2126367** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		117	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908F01**
04-Sep-19

Client: Vertex Resource Group Ltd.
Project: Rick Deckard State 25 28 4 WA 2H

Sample ID: **LCS-47096** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **47096** RunNo: **62455**
Prep Date: **8/27/2019** Analysis Date: **8/28/2019** SeqNo: **2126368** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		5.000		109	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 Quanitative 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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908F01**
04-Sep-19

Client: Vertex Resource Group Ltd.
Project: Rick Deckard State 25 28 4 WA 2H

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS** Batch ID: **SL62453** RunNo: **62453**
Prep Date: Analysis Date: **8/27/2019** SeqNo: **2123755** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.6	68	135			
Toluene	1.0	0.050	1.000	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.2	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.1	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.50		0.5000		99.8	70	130			

Sample ID: **1908f01-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **Base19-02 1.0'** Batch ID: **SL62453** RunNo: **62453**
Prep Date: Analysis Date: **8/27/2019** SeqNo: **2123757** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.021	0.8347	0	96.9	57.1	141			
Toluene	0.77	0.042	0.8347	0	91.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.42		0.4174		102	70	130			
Surr: 4-Bromofluorobenzene	0.41		0.4174		98.0	70	130			
Surr: Dibromofluoromethane	0.44		0.4174		106	70	130			
Surr: Toluene-d8	0.41		0.4174		98.1	70	130			

Sample ID: **1908f01-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **Base19-02 1.0'** Batch ID: **SL62453** RunNo: **62453**
Prep Date: Analysis Date: **8/27/2019** SeqNo: **2123758** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.75	0.021	0.8347	0	89.7	57.1	141	7.70	20	
Toluene	0.75	0.042	0.8347	0	89.4	70	130	2.74	20	
Surr: 1,2-Dichloroethane-d4	0.42		0.4174		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.41		0.4174		97.9	70	130	0	0	
Surr: Dibromofluoromethane	0.44		0.4174		105	70	130	0	0	
Surr: Toluene-d8	0.41		0.4174		97.1	70	130	0	0	

Sample ID: **rb2** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **SL62453** RunNo: **62453**
Prep Date: Analysis Date: **8/27/2019** SeqNo: **2123769** 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								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908F01**
04-Sep-19

Client: Vertex Resource Group Ltd.
Project: Rick Deckard State 25 28 4 WA 2H

Sample ID: **rb2** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **SL62453** RunNo: **62453**
Prep Date: Analysis Date: **8/27/2019** SeqNo: **2123769** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		91.0	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.6	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.7	70	130			
Surr: Toluene-d8	0.49		0.5000		97.1	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 Quanitative 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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908F01**
04-Sep-19

Client: Vertex Resource Group Ltd.
Project: Rick Deckard State 25 28 4 WA 2H

Sample ID: **1908f01-002a ms** SampType: **MS** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **Base19-03 1.0'** Batch ID: **GS62453** RunNo: **62453**
Prep Date: Analysis Date: **8/28/2019** SeqNo: **2123773** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.4	17.07	0	91.4	70	130			
Surr: BFB	340		341.3		100	70	130			

Sample ID: **1908f01-002a msd** SampType: **MSD** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **Base19-03 1.0'** Batch ID: **GS62453** RunNo: **62453**
Prep Date: Analysis Date: **8/28/2019** SeqNo: **2123774** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	3.4	17.07	0	90.4	70	130	1.14	20	
Surr: BFB	350		341.3		103	70	130	0	0	

Sample ID: **2.5ug gro lcs2** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS** Batch ID: **GS62453** RunNo: **62453**
Prep Date: Analysis Date: **8/27/2019** SeqNo: **2123784** 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	96.8	70	130			
Surr: BFB	490		500.0		98.2	70	130			

Sample ID: **rb2** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS** Batch ID: **GS62453** RunNo: **62453**
Prep Date: Analysis Date: **8/27/2019** SeqNo: **2123785** 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	480		500.0		96.3	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 Quanitative 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 Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: VERTEX CARLSBAD Work Order Number: 1908F01 RcptNo: 1

Received By: Daniel M. 8/27/2019 9:15:00 AM

Completed By: **Michelle Garcia** 8/27/2019 9:51:18 AM Michelle Garcia

Reviewed By: MG 08/27/19

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: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 8/27/19

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	4.7	Good	Yes			
2	4.6	Good	Yes			
3	3.8	Good	Yes			
4	4.2	Good	Yes			

Chain-of-Custody Record

Client: Vertex Resource Group

Mailing Address: 213 S. Mesa St.
Carlsbad, NM 88220

Phone #: 575-361-1137

email or Fax#: Permian@vertex.ca

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush 24 hour (~~48 hour~~ ST)

Project Name: Rick Deckard State 25-28-4 WA #21H

Project #: 19E-00614

Project Manager: Dennis Williams
dwilliams@vertex.ca

Sampler: Austin Harris

On Ice: ☑ Yes ☐ No

# of Coolers: 4

Cooler Temp(including CF): Remarks (°C)

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

Date	Time	Matrix (MeOH mg 8/27)	Sample Name		Container Type and #	Preservative Type	HEAL No. 1908F01	Analysis Request: BTEX MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8-24-19	9:00 A	Soil	Base19-02	1.0'	4 glass Jar	Ice	-001	X	X					X			
8-24-19	9:15 A		Base19-03	1.0'			-002	X	X					X			
8-24-19	9:30 A		Base19-12	1.5'			-003	X	X					X			
8-24-19	9:45 A		Base19-14	1.5'			-004	X	X					X			
8-24-19	10:00 A		Base19-15	1.5'			-005	X	X					X			
8-24-19	10:15 A		Base19-16	1.0'			-006	X	X					X			
8-24-19	10:30 A		Base19-17	2.0'			-007	X	X					X			
8-24-19	10:45 A		Base19-18	1.0'			-008	X	X					X			
8-24-19	11:00 A		Base19-19	3.5'			-009	X	X					X			
8-24-19	11:15 A		Base19-20	1.0'			-010	X	X					X			
8-24-19	11:30 A		Base19-21	1.0'			-011	X	X					X			

Date	Time	Relinquished by	Received by	Via	Date	Time
8-24-19	6:15 P	Austin Harris				
8/26/19	1900			courier	8/27/19	9:15

Remarks: 5.0 - 0.3 = 4.7°C
4.9 - 0.3 = 4.6°C
4.1 - 0.3 = 3.8°C
4.5 - 0.3 = 4.2°C

Chain-of-Custody Record

Client: ~~Marathon Oil~~ BTH Vertex Resource Group LTD

Mailing Address: 213 S. Mesa St. Carlsbad, NM 88220

Phone #: 575-361-1137

email or Fax#: Permian@Vertex.ca

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush_____

Project Name: Rich Deckard State 25-28-4 WA #2H

Project #: 19E-00614

Project Manager: Dennis Williams dwilliams@vertex.ca

Sampler: Austin Harris

On Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp(including CF): (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8/18/19	9:00A	Soil	Base19-06 0.5	6oz Jar	Ice		X	X					X			
8/18/19	9:30A		Base19-07 0.5				X	X					X			
8/18/19	9:45A		Base19-08 0.5				X	X					X			
8/18/19	10:00A		Base19-09 0.5				X	X					X			
8/18/19	10:15A		Base19-10 0.5				X	X					X			
8/18/19	10:30A		Base19-11 1.0'				X	X					X			
8/18/19	10:45A		Base19-12 1.0'				X	X					X			
8/18/19	11:00A		Base19-13 1.0'				X	X					X			
8/18/19	11:15A		Base19-14 1.0'				X	X					X			
8/18/19	11:30A		Base19-15 1.0'				X	X					X			
8/18/19	11:45A	√	Base19-16 0.5'	√	√		X	X					X			
8/18/19	12:00P		Base19-17 1.0'				X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/18/19	2200	Austin Harris				
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
					8/18/19	2200

Remarks:

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.

Chain-of-Custody Record

Client: Vertex Resource Group LTD

Mailing Address: 213 S. Mesa St.
Carlsbad NM, 88220

Phone #: 575-361-1137

email or Fax#: Permian@vertex.ca

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush_____

Project Name: Rich Dechard 25-28-4 1/A #21H

Project #: 19E-00614

Project Manager: Dennis Williams
dwilliams@vertex.ca

Sampler: Austin Harris

On Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp(including CF): (°C)

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8/18/19	1:00P	Soil	Base19-18 0.5'	6oz Jar	Ice		X	X					X			
8/18/19	3:30P	"	Base19-19 3.0'	"	"		X	X					X			
8/18/19	4:00P	"	Base19-20 0.5'	"	"		X	X					X			
8/18/19	4:30P	"	Base19-21 0.5'	"	"		X	X					X			
8/18/19	5:00P	"	Base19-22 0.5'	"	"		X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/19/19	2220	Austin Harris			8/18/19	2240
8/19/19	7:00					

Remarks:

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Chain-of-Custody Record

Client: Vertex Resource Group LTD

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Carlsbad NM. 88220

Phone #: 575-361-1137

email or Fax#: Permian@Vertex.ca

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush

Project Name: Rich Deckard State 25-28-4 WA #2H

Project #: 19E-00614

Project Manager: Dennis Williams dwilliams@vertex.ca

Sampler: Austin Harris

On Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp(including CF): (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8/17/19	9:00 A	Soil	BG19-01 0.0'	Glass Jar	Ice		X	X					X			
8/17/19	9:15 A		BG19-01 1.0'				X	X					X			
8/17/19	9:30 A		BG19-01 2.0'				X	X					X			
8/17/19	11:00 A		Base19-01 0.5'				X	X					X			
8/17/19	11:30 A		Base19-02 0.5'				X	X					X			
8/17/19	12:00 P		Base19-03 0.5'				X	X					X			
8/17/19	12:30 P		Base19-04 0.5'				X	X					X			
8/17/19	12:45 P	V	Base19-05 0.5'	V	V		X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/19/19	2200	Austin Harris			8/18/19	2200
8/19/19	0710					

Remarks:

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.

Chain-of-Custody Record

Client:

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☐ **Rush**_____

Project Name:

Project #:

Project Manager:

Sampler:

On Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp(including CF): (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)						
8/9/19	9:40 A	Soil	Bore 19-01	4oz Jar	Ice		+	+					+									
8/9/19	1:30 A		Bore 19-07				+	+					+									
8/9/19	9:45 A		Bore 19-08				+	+					+									
8/9/19	10:00 A		Bore 19-09				+	+					+									
8/10/19	10:15 A		Bore 19-10				+	+					+									
8/10/19	10:30 A		Bore 19-11				+	+					+									
8/10/19	10:45 A		Bore 19-12				+	+					+									
8/10/19	11:00 A		Bore 19-13				+	+					+									
8/10/19	11:15 A		Bore 19-14				+	+					+									
8/10/19	11:30 A		Bore 19-15				+	+					+									
8/10/19	11:45 A	√	Bore 19-16	√	√		+	+					+									
8/10/19	12:00 P		Bore 19-17				+	+					+									

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/10/19	2:20					
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

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Client: Vertex Resource Group LTD

Mailing Address: 213 S. Mesa St. Carlsbad NM, 88220

Phone #: 575-361-1137

email or Fax#: Permian@vertex.ca

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush_____

Project Name: Rich Deckard 25-28-4 1/A #21H

Project #: 19E-00614

Project Manager: Dennis Williams dwilliams@vertex.ca

Sampler: Austin Harris

On Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp(including CF): (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8/18/19	1:00P	Soil	Base19-18 0.5'	6oz Jar	Ice		X	X					X			
8/18/19	3:30P		Base19-19 3.0'				X	X					X			
8/18/19	4:00P		Base19-20 0.5'				X	X					X			
8/18/19	4:30P		Base19-21 6.5'				X	X					X			
8/18/19	5:00P		Base19-22 0.5'				X	X					X			

Date: 8/19/19 Time: 2200 Relinquished by: Austin Harris Received by: Via: Date Time 8/18/19 2200

Date: 8/19/19 Time: 1700 Relinquished by: Received by: Via: Date Time

Remarks:

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.

Chain-of-Custody Record

Client: Vertex Resource Group LTD

Mailing Address: 213 S. Mesa St.
Carlsbad NM. 88220

Phone #: 575-361-1137

email or Fax#: Permian@Vertex.ca

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush_____

Project Name: Rich Deckard State 25-28-4 WA #2H

Project #: 19E-00614

Project Manager: Dennis Williams dwilliams@vertex.ca

Sampler: Austin Harris

On Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp(including CF): (°C)

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)					
8/17/19	9:00 A	Soil	BG19-01 0.0'	Glass Jar	Ice		X	X					X								
8/17/19	9:15 A		BG19-01 1.0'				X	X					X								
8/17/19	9:30 A		BG19-01 2.0'				X	X					X								
8/17/19	11:00 A		Base19-01 0.5'				X	X					X								
8/17/19	11:30 A		Base19-02 0.5'				X	X					X								
8/17/19	12:00 P		Base19-03 0.5'				X	X					X								
8/17/19	12:30 P		Base19-04 0.5'				X	X					X								
8/17/19	12:45 P	V	Base19-05 0.5'	V	V		X	X					X								

Analysis Request

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
8/19/19	2200	Austin Harris			8/18/19	2200
8/19/19	0710					

Remarks:

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.