

Remediation Summary and Closure Request

Devon Energy Corporation Tomcat Federal 21 Com #1 Lea County, New Mexico Unit Letter "F", Section 21, Township 23 South, Range 32 East Latitude 32.291682 North, Longitude 103.682428 West NMOCD Incident # nKJ1528146835

Prepared For:

Devon Energy Corporation 6488 Seven Rivers Hwy Artesia, NM 88210

Prepared By:

Hungry Horse, LLC 4024 Plains Hwy Lovington, NM 88260 Office: (575) 393-3386

July 2022

Bradley Wells

Bradley Wells Project Manager bwells@hungry-horse.com

Daniel Dominguez Environmental Manager ddominguez@hungry-horse.com

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Received by OCD: 7/29/2022 3:07:03 PM



The following Remediation Summary and Closure Request serves as a condensed update on field activities undertaken at the afore referenced Site.

Background:

The site is located in Unit Letter F (SE/NW), Section 21, Township 23 South, Range 32 East, approximately 32 miles Southwest of Eunice, in Lea County, New Mexico. The property is on Federal land. Topographic Map, OSE POD Locations Map, and USGS Well Locations Map are included as Figure 1, Figure 2, and Figure 3, respectively.

The release occurred on an active tank battery; Latitude 32.291682 North, Longitude 103.682428 West. The Initial NMOCD Form C-141 indicates on April 12, 2015, approximately 135 bbls of produced water overflowed the tanks due to a SCADA pack failure. The release was contained within the unlined containment area. Approximately 130 bbls of produced water were recovered. Previously submitted NMOCD Form C-141 is available on the NMOCD Imaging System. NMOCD Form C-141 Closure page is included as Attachment V. The release event occurred, remediation activities were completed, and closure was accepted before the NMOCD Rule change on August 24, 2018.

NMOCD Site Classification:

A search of the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) groundwater databases was completed in an effort to determine the horizontal distance to known water sources within a half mile radius of the release site. Approximate depth to groundwater was determined using maintained and published water well data. Karst mapping indicates the site is not located in a Karst designated area. Depth to groundwater information is provided as Attachment III and the results are depicted on Figures 2 & 3.

One USGS water well was located within a half mile of the release area, listing depth to water at approximately five hundred fifteen feet bgs. The Lea County Depth to Ground Water map listed depth to water at approximately four hundred feet bgs. At that time the NMOCD allowed use of these maps to estimate depth to water. Depth to water was thus determined to be greater than one hundred feet bgs at this location. Utilizing this information, the NMOCD Recommended Remedial Action Levels (RRAL's) for the Site were determined as follows:

| Depth to Groundwater | Constituent | Method | RRAL |
|-------------------------|-----------------|-----------------------------------|-------------|
| | Chloride | EPA 300.0 or SM4500 CLB | 1,000 mg/kg |
| | TPH (GRO + DRO) | EPA SW-846 Method 8015M | 5,000 mg/kg |
| >100' | BTEX | EPA SW-846 Methods 8021B or 8260B | 50 mg/kg |
| | Benzene | EPA SW-846 Methods 8021B or 8260B | 10 mg/kg |



Delineation and Remediation Activities:

On September 29, 2015, Hungry Horse conducted an initial site assessment and delineation. Soil samples were collected using hand tools, no mechanical equipment was used. Twelve delineation soil samples were collected from three sample locations, SP1, SP2, and SP3, and were submitted to the laboratory for analysis of chloride.

Laboratory analytical results indicated contaminant concentrations were above the NMOCD delineation requirement of 250 mg/kg in each of the submitted samples, with the exception of SP3 at 2 feet bgs, which exhibited chloride concentration of 240 mg/kg.

On October 6, 2015, the Tomcat 21 Fed 1 Remediation Work Plan Packet was emailed to Kellie Jones at the NMOCD and Shelly Tucker at the BLM. The work plan proposed to hand excavate two feet of impacted material from the area of Sample Point #1 and one foot from the area of Sample Point #3. On October 8, 2015, the proposed work plan was approved by the OCD and BLM. Work plan and email correspondence are provided as Attachment I.

The release area was excavated, via hand tools, according to the approved work plan. Delineation was attempted at SP#1 in an effort to determine, the vertical extent of chloride contamination, and where chloride concentrations were less than or equal to 250 mg/kg. Due to the proximity of tanks and process equipment, delineation was conducted via hand auger. At eight feet below ground surface, auger refusal was encountered due to hard packed caliche. As deeper delineation was not possible, soil samples were collected and submitted to the laboratory for analysis of chloride.

Laboratory analytical results indicated contaminant concentrations were above the NMOCD delineation requirement of 250 mg/kg in each of the submitted samples and were presented to the OCD and BLM. On November 3, 2015, closure approval was given with the stipulation that the incident would remain open until the battery is removed from service. At that time a complete delineation and remediation would be required. Approximately 72 cy of excavated impacted material was transported to an NMOCD approved disposal facility, the excavation was backfilled with clean, non-impacted caliche and brought back to grade. Email correspondence are provided in Attachment I.

However, as the oil and gas industry faced a slowdown in 2016, Devon put a hold on all environmental jobs and related work before a closure report with Final C-141 could be submitted to the NMOCD. In June 2022, Devon requested Hungry Horse prepare for submission this Remediation Summary and Closure Request with NMOCD Form C-141 Closure page.

On May 8, 2020, a Remediation Summary Report Form was received by the NMOCD, however, to date, no response has been received. Report is provided in Attachment I.

A Sample Location Map is provided as Figure 4. A Summary of Soil Sample Laboratory Analytical Results is provided as Table 1 and Laboratory Analytical Reports are provided as Attachment IV. Site Photographs are provided as Attachment II.

Restoration, Reclamation, and Re-Vegetation:

Based upon laboratory analytical results from confirmation soil samples, and with OCD and BLM approval, the excavated area was backfilled and contoured to achieve erosion control and preserve surface water flow. As the affected area is located on an active tank battery, seeding will not be required.

Closure Request:

Remediation activities were conducted in accordance with NMOCD and BLM approved work plan. Soil affected above the NMOCD Recommended Remedial Action Levels has been excavated and hauled to an NMOCD approved disposal facility. Laboratory analytical results from soil samples were accepted by the NMOCD and BLM and closure report with Final C-141 was requested.

Based on laboratory analytical results and field activities conducted to date, Devon Energy Corporation respectfully requests closure be granted for the Tomcat Federal 21 Com #1 location.

Limitations:

Hungry Horse, LLC, has prepared this Remediation Summary and Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended. Hungry Horse has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Hungry Horse has not conducted an independent examination of the facts contained in referenced materials and statements. Hungry Horse has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Hungry Horse notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.





Distribution:

Devon Energy Corporation 6488 Seven Rivers Hwy Artesia, NM 88210

New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 2 506 W. Texas Artesia, NM 88210

New Mexico Bureau of Land Management 620 E Greene St Carlsbad, NM 88220

Figures

Received by OCD: 7/29/2022 3:07:03 PM



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Table

TABLE 1 Summary of Soil Sample Laboratory Analytical Results Devon Energy Corporation Tomcat Federal 21 Com #1 NMOCD Ref. #: nKJ1528146835

| Sample ID | Date | Depth (ft) | Soil Status | Field Chloride | Benzene (mg/kg) | BTEX (mg/kg) | GRO C ₆ -C ₁₀ (mg/kg) | DRO C ₁₀ -C ₂₈ (mg/kg) | TPH C ₆ -C ₃₆ (mg/kg) | Chloride (mg/kg) |
|-----------------|------------|---------------|-------------|-------------------|--------------------|-----------------|---|--|---|---------------------|
| | 9/29/15 | Surf | Excavated | - | - | - | - | - | - | 4,880 |
| | 9/29/15 | 1 | Excavated | - | - | - | - | - | - | 13,200 |
| | 9/29/15 | 2 | Excavated | - | - | - | - | - | - | 7,760 |
| SP1 | 9/29/15 | 3 | In-Situ | - | - | - | - | - | - | 6,900 |
| | 10/28/15 | 5 | In-Situ | - | - | - | - | - | - | 576 |
| | 10/28/15 | 7 | In-Situ | - | - | - | - | - | - | 6,130 |
| | 10/28/15 | 8 | In-Situ | - | - | - | - | - | - | 7,600 |
| | 9/29/15 | Surf | Excavated | - | - | - | - | - | - | 128 |
| SP2 | 9/29/15 | 1 | Excavated | - | - | - | - | - | - | 576 |
| 372 | 9/29/15 | 2 | In-Situ | - | - | - | - | - | - | 736 |
| | 9/29/15 | 3 | In-Situ | - | - | - | - | - | - | 736 |
| | 9/29/15 | Surf | Excavated | - | - | - | - | - | - | 3,040 |
| 502 | 9/29/15 | 1 | Excavated | - | - | - | - | - | - | 576 |
| SP3 | 9/29/15 | 2 | In-Situ | - | - | - | - | - | - | 240 |
| | 9/29/15 | 3 | In-Situ | - | - | - | - | - | - | 5,760 |
| NMOCD Recommend | ed Remedia | Action | Levels | | 10 | 50 | - | - | 5,000 | 1,000 |

Attachment I NMOCD Correspondence

| Rac E Ca E VOD 7/29/2022 3:07:03 PM | APPROVED Conditional Page 15 of 9. |
|---|------------------------------------|
| By Kellie Jones at 11:16 am, Oct 08, 2015 | |
| παινσι | RY HOKSE, LLC |

3709 S. Eunice HWY P.O. Box 1058 Hobbs, NM 88241 Office: 575-393-3386 Fax: 575-391-4585 info@hungry-horse.com DIRT WORK * ON-SITE REMEDIATION SOIL TESTING * EXCAVATION * ELECTRICAL Please to vertical delineate SP1 to 250 ppm chlorides.
 Ensure BLM approval/ concurrence.

60ct15

To: Kellie Jones, New Mexico Oil Conservation Division Shelly Tucker, Bureau of Land Management Reference: Remediation Work Plan Operator: Devon Energy Production Company Location: Tomcat 21 Fed 1 API: 30-025-33356 Legals: UL. F, Sec. 21, T23S, R32E GPS: 32.2927 -103.6815

Site Information

This site is located in Lea County, New Mexico approximately 3.6 miles north of the intersection of New Mexico Highway 128 and Red Road and 3.5 miles east of Red Road. Based upon the New Mexico State Engineer's website, there is one water well in the area with a depth to groundwater of 400'. The Lea County Depth to Groundwater Map indicates the same depth to groundwater.

This battery is an active and working site. The produced water release that occurred on 12Apr15, had no impact outside the berms of the battery. All fluid released, remained inside the earthen berms.

Work Conducted to Date

A delineation was conducted by use of hand tools on 29Sept15. Due to safety concerns, no mechanical equipment was used. Soil samples were obtained at three sample points from the surface to 3' below ground surface (BGS). Lab analysis was conducted for Chlorides. (See attached map with sample points and lab results.)

Proposed Remediation

Based upon the delineation results, depth to ground water, and the safety concerns of working inside a battery, I propose to hand excavate 2' of impacted material from the area of Sample Point #1 and 1' from the area of Sample Point #3. This encompasses the area between and on both side of the tanks. A complete delineation and remediation will be conducted at the time the facility is shut in and taken out of service.

All impacted material will be transported to a division approved facility for disposal. The battery will then be backfilled with fresh material.

Sincerely,

Vernon K. Black, Hungry Horse, LLC

Remediation Summary Report Form

General Information

This report prepared by Hungry Horse, LLC on 5Nov15, is in response to the release for Devon Energy Production at the Tomcat 21 Fed #1 Battery, located in rural Lea County, New Mexico, for the release that occurred 12Apr15, due to equipment failure.

| Date: 5Nov15 | | | | |
|------------------------|---------------------------|---------------------------|--------------------------------|----|
| Client: Devon Energy P | | | | |
| Site Name: Tomcat 21 | Fed #1 | County: Lea | State: New Mexico | |
| API: 30-025-33356 | | | | |
| Site Coordinates | Latitude: 32.2927 | | | |
| | Longitude: -103.6815 | | | |
| Surface Owner: BLM | | | | |
| | | | | |
| Release Description ar | nd Assessment | | | |
| Date of Spill: 12Apr15 | | | | |
| Type of Spill: Oil | X Produced Water | Condensate Othe | r (Specify): | |
| | ipment Failure Valve | Failure Line Rupture | Leaking Tank X Tank Overfill | |
| | r (Specify): | | | |
| Other Contributing Fac | ctors or Comments: N/A | 1 | | |
| Quantity Spilled: 135 | | ity Recovered: 130 bbls | Total Released: 5 bbls | |
| Method of Recovery: | X Vacuum Truck | Other (Specify): | | NI |
| New Mexico Oil Conse | ervation Division Notifie | | Completed and Submitted: X Yes | No |
| Spill Area Impacted: | X Inside Firewall | On Production Pad | | |
| | | ng outside of firewall wa | | |
| Total Square Foot Imp | acted: 3800 Estima | ated Depth: 1' | Volume (Cu. Yards): 75 | |
| Other Comments: Not | hing outside of firewall | was impacted | | |
| | | | | |

Remediation Activity Summary

The remediation work plan was executed as approved by both NM OCD and BLM. Approximately one foot of impacted soil was removed from the impacted areas except for the area around Sample Point #1 where 2' of impacted soil was removed. As per the approved work plan, further delineation was conducted at SP #1 to try and determine the point at which Chlorides reached 250 ppm of less. Due to safety concerns, this further delineation was conducted by use of a hand auger. At eight foot below ground surface, auger refusal was encountered due to hard packed caliche. Soil samples were collected and lab analysis conducted. Results, which did not reach the 250 ppm goal, were resented to NM OCD and BLM. Due to safety concerns further delineation was not practical. Closure approval was given with the stipulation that the RP would remain open until such time the battery is removed from service and a full delineation and remediation is completed. All impacted material was transported to a division approved disposal facility and the excavated battery was backfilled with fresh caliche and brought back to grade.

Vernon K. Black, Hungry Horse, LLC

Vernon Black

From:Vernon BlackSent:Tuesday, November 03, 2015 9:28 AMTo:Kellie Jones (kellie.jones@state.nm.us)Cc:Shelly J. Tucker (stucker@blm.gov); Brett Fulks (Brett.Fulks@dvn.com)Subject:Tomcat 21 Fed #1 Battery

Kellie,

Thanks for taking the time to meet with me this morning concerning the work at the above referenced location. I and my customer, Devon Energy Production, understand the NM OCD requirement for determining the depth at which Chlorides reach a level of 250 ppm or less. However, as we discussed it is a serious safety concern to try using equipment, other than hand tools, to determine the point at which the Chlorides reach this level inside the battery. We appreciate you taking this into consideration and will proceed, as you approved, to backfill the excavated site with the stipulation that the RP will remain open until such time the battery is removed from service. At that time a complete delineation/remediation will be performed.

Thanks for your help,

Vernon K. Black Hungry Horse, LLC PO Box 1058 Hobbs, NM 88241 575-393-3386 office 575-631-2253 cell

Vernon Black

| From: | Tucker, Shelly <stucker@blm.gov></stucker@blm.gov> |
|----------|--|
| Sent: | Tuesday, November 03, 2015 9:59 AM |
| To: | Vernon Black |
| Cc: | Kellie Jones (kellie.jones@state.nm.us); Brett Fulks (Brett.Fulks@dvn.com) |
| Subject: | Re: Tomcat 21 Fed #1 Battery |

Thank you for the information. I will note this in my records.

The BLM approval/acceptance does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

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

Sincerely,

Shelly J Tucker

Environmental Protection Specialist Bureau of Land Management

620 E. Greene St Carlsbad, NM 88220

575.234.5905 - Direct 575.361.0084 - Cellular

stucker@blm.gov

×

On Tue, Nov 3, 2015 at 9:28 AM, Vernon Black <<u>vblack@hungry-horse.com</u>> wrote:

Kellie,

Thanks for taking the time to meet with me this morning concerning the work at the above referenced location. I and my customer, Devon Energy Production, understand the NM OCD requirement for determining the depth at which Chlorides reach a level of 250 ppm or less. However, as we discussed it is a serious safety concern to try using equipment, other than hand tools, to determine the point at which the Chlorides reach this level inside the battery. We appreciate you taking this into consideration and will proceed, as you approved, to backfill the

excavated site with the stipulation that the RP will remain open until such time the battery is removed from service. At that time a complete delineation/remediation will be performed.

Thanks for your help,

Vernon K. Black

Hungry Horse, LLC

PO Box 1058

Hobbs, NM 88241

575-393-3386 office

575-631-2253 cell

| V | e | rn | 0 | n | B | a | ck | |
|---|---|----|---|---|---|---|----|--|
| • | - | | - | | | - | | |

| From: | Jones, Kellie, EMNRD <kellie.jones@state.nm.us></kellie.jones@state.nm.us> |
|----------|--|
| Sent: | Thursday, October 08, 2015 1:21 PM |
| To: | Vernon Black; Shelly J. Tucker (stucker@blm.gov) |
| Cc: | Reggie Brooks; Terry Smith |
| Subject: | RE: Devon-Tomcat 21 Fed 1 Battery |
| Subject: | RE: Devon-Tomcat 21 Fed 1 Battery |

Vernon,

Here is information on the recent submittal.

| 3902 | 10/8/2015 | A | Devon | Tomcat 21 Battery | 23S 32E 21 F | 30 025 33356 | 4, |
|------|-----------|---|-------|-------------------|--------------|--------------|----|
| 3302 | 10/0/2010 | | | | | | |

The work plan is conditionally approved, with the condition of complete vertical delineation at the site down to 250 ppm chlorides.

If you have any questions, please feel free to contact me.

Kellie Jones Environmental Specialist, District 1 Oil Conservation Division, EMNRD 575-393-6161 ext. 111 575-370-3180 (emergency-cell) E-Mail: kellie.jones@state.nm.us

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Vernon Black [mailto:vblack@hungry-horse.com] Sent: Wednesday, October 07, 2015 10:21 AM To: Jones, Kellie, EMNRD; Shelly J. Tucker (stucker@blm.gov) Cc: Reggie Brooks; Terry Smith Subject: Devon-Tomcat 21 Fed 1 Battery

Kellie,

Thanks for taking the time to meet with me this morning to discuss the work plan for the above referenced site. As per our conversation, we'll proceed with the remediation plan as approved with the stipulation for further delineation at SP #1. We'll conduct further sampling/analysis at this point and provide you the results.

Shelly, for your review.

Thanks for all your help, Vernon K. Black Hungry Horse, LLC PO Box 1058

.

Hobbs, NM 88241 575-393-3386 office 575-631-2253 cell

Vernon Black

| From: | Tucker, Shelly <stucker@blm.gov></stucker@blm.gov> |
|----------|---|
| Sent: | Thursday, October 08, 2015 10:30 AM |
| To: | Vernon Black |
| Cc: | Kellie Jones (kellie.jones@state.nm.us); Reggie Brooks; Terry Smith |
| Subject: | Re: Devon-Tomcat 21 Fed 1 Battery |

Vernon,

The BLM accepts/approves your proposed work plan - with concurrence of NMOCD stipulation of full delineation at SP1

The BLM approval/acceptance does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

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

Sincerely,

Shelly J Tucker Environmental Protection Specialist Bureau of Land Management

620 E. Greene St Carlsbad, NM 88220

575.234.5905 - Direct 575.361.0084 - Cellular

stucker@blm.gov

×

On Wed, Oct 7, 2015 at 10:21 AM, Vernon Black <<u>vblack@hungry-horse.com</u>> wrote:

Kellie,

Thanks for taking the time to meet with me this morning to discuss the work plan for the above referenced site. As per our conversation, we'll proceed with the remediation plan as approved with the stipulation for further delineation at SP #1. We'll conduct further sampling/analysis at this point and provide you the results.

Shelly, for your review.

Thanks for all your help,

Vernon K. Black

Hungry Horse, LLC

PO Box 1058

Hobbs, NM 88241

575-393-3386 office

575-631-2253 cell

Attachment II Site Photographs





















Attachment III Depth to Groundwater

WELLS WITH WELL LOG INFORMATION

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

| | | | | No wells found. |
|---------------------------|----------------------------------|----------------------|--------------------------------------|---|
| UTMNAD83 Ra | <u>idius Search (in meters):</u> | | | |
| Easting (X): | 624060.85 | Northing (Y): | 3573529.32 | Radius: 805 |
| The data is familahed by | the NMOSE/ICC and is accounted t | hu sha naainians wis | h the annuaced understanding that th | e OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any |
| particular purpose of the | | by the recipient wit | n me expressed understanding that th | c OSE/ISC make no warranues, expressed or imprice, concerning the accuracy, compreteness, reliability, usability, or suitability for any |

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and interactive map to access real-time water data from over 13,500 stations nationwide. Explore the NEW LISGS
 Full News

Water Quality Samples for the Nation

m: Web Interface

To view additional data-quality attributes, output the results using these options: one result per row, expanded attributes. Additional precoutions are here.

USGS 321735103402501 235 32E 21 241A

Langebic das for bit site Verb-Saltz, Paktas metje v (60) les Currh, Nev Merko vice das 126/0715, Longebic 103/40/25* MAD22 Lattouts 322/1735; Longebic 103/40/25* MAD22 Lattouts 322/1735; Longebic 103/40/25* MAD22 This well is completed in the Other aqu/res (M99007HER) national aqu/er file well is completed in the Other aqu/ses Sandstone (2135NR5) local aquifer

| | | | | o) loost adame | | | | | | | | | | | | | | Output for | nats | | | | | | | | | | | | | | | | | |
|--------------------------|-------------------|--------------------------------------|--------------------------|--------------------------|------------------------------|-----------------------|----------------|--|---|--|---|--|---|--|---|---|--|---|--|---|---|--|--|--|---|---|---|--|--|--|--|---|--|--|--|---|
| Parameter Group Peris | od of Record tab | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Internative of available | weter granty d | eta for printigo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intentions of water-ga | ality data with r | striesa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| lab-separated data, o | ne result per ror | x. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| lab-vectorated data or | e sample per m | w with remunk spe | ies combined with | values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sub-separated data or | e sattple per m | w with tab-delimit | er for remark ood | <u>es</u> . | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eselect output for ma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample Datetime d | ime atum | Time datum reliability code | Sample Hedium Code | Hydro- logic Event | Hydro- legic Condition | Geo- logic unit | Sample type | Sam- pling dipth, feet (00003) | Temper- ature, water, deg C (60010) | Specif- ic conduc- tance, wat unf us/cm @ 25 degC (00095) | Hydro- gen ion, water, unfftrd calcd, mg/L (00191) | pH, water, unftrd fiels, std units (00400) | Carbon dioxide water, unfitrd mg/L (00405) | ANC, wat unf fixed end pt, field, mg/L as CaCO3 (00410) | Bicar- bonate, wat unf fixed end pt, fiald, mg/L (00440) | Carbon- ats, wat unf fixed end pt, field, mg/L (00445) | Nitrate + nitrite water, fitrd, mg/L as N (00631) | Ortho- phos- phate, water, filtrd, mg/L (00660) | Ortho- phos- phate, water, iftrd, mg/L as P (00671) | Hard- ness, water, mg/L as CaCO3 (00900) | Noncarb hard- ness, wat unf field, mg/L as CaCO3 (00902) | Calcium water, fftrd, mg/L (00915) | Nagnes- ium, water, fitrd, mg/L (00925) | Sodium, water, fltrd, mg/L (00930) | Sodium adsorp- tion ratio (09931) | Sodium fraction of cations percent (00932) | Potas- skim, water, ftrd, mg/L (00935) | Chlor- ide, waber, fkrd, mg/L (00940) | Sulfate water, fitrd, mg/L (00945) | Huor- ide, water, fitrd, mg/L (00950) | Silica, water, Htrd, mg/L as Si02 (00955) | Iron, water, filtrd, ug/L (01046) | Mangamese, water, filtrd, ug/L (01056) | Dis- solvad solids, sum of consti- tuents, mg/L (70301) | Dis- solved solids, water, tons/ acre-ft (70303) | Depth of hole, feet balow LSD (72001) |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1972-09-21 | NDT | 7 | r w | IG . | p | A 23151 | IRS | 9 515 | 20.5 | 701 | 0.00001 | 6.1 | 4.0 | 255 | 311 | 0.0 | 2,40 | 0.030 | 0.010 | 210 | 0.0 | 29.0 | 34.0 | 75.0 | 2.2 | 43 | 2.00 | 15.0 | 89.0 | 1.80 | 17.0 | м | 0.0 | 427 | 0.58 | 515 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Description Presence verified but not quartified Water Quality Remark Code

U.S. Department of the Interior | U.S. Geological Survey Title: Water Quality Samples for USA: Sample Data URL: https://nwis.waterdata.usgs.gov/awia/awdata3 Team

Page Contact Information: USOS Water Data Sur Page Last Hod Fiel: 2022-07-27 16:50:23 EDT 224 - 641 Indexed

TSI.my

Attachment IV Laboratory Analytical Reports



October 01, 2015

VERNON BLACK Hungry Horse Environmental P.O. Box 1058 Hobbs, NM 88240

RE: TOMCAT 21 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 09/29/15 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
|------------------|------------------------------|
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240 Fax To: (505) 391-4585

| Received: | 09/29/2015 | Sampling Date: | 09/29/2015 |
|-------------------|-------------------|---------------------|----------------|
| Reported: | 10/01/2015 | Sampling Type: | Soil |
| Project Name: | TOMCAT 21 BATTERY | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Judy Garcia |
| Project Location: | LEA COUNTY | | |

Sample ID: SP #1 SURFACE (H502574-01)

| Chloride, SM4500Cl-B | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 4880 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #1 1' BGS (H502574-02)

| Chloride, SM4500Cl-B | mg/kg Analyzed By: HM | | d By: HM | | | | | | |
|----------------------|-----------------------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 13200 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #1 2' BGS (H502574-03)

| Chloride, SM4500Cl-B | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 7760 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #1 3' BGS (H502574-04)

| Chloride, SM4500Cl-B | mg, | /kg | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 6900 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

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*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager


PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240 Fax To: (505) 391-4585

| Received: | 09/29/2015 | Sampling Date: | 09/29/2015 |
|-------------------|-------------------|---------------------|----------------|
| Reported: | 10/01/2015 | Sampling Type: | Soil |
| Project Name: | TOMCAT 21 BATTERY | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Judy Garcia |
| Project Location: | LEA COUNTY | | |

Sample ID: SP #2 SURFACE (H502574-05)

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: HM | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 128 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #2 1' BGS (H502574-06)

| Chloride, SM4500Cl-B | mg | /kg | Analyze | d By: HM | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 576 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #2 2' BGS (H502574-07)

| Chloride, SM4500Cl-B | mg | /kg | Analyze | d By: HM | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 736 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #2 3' BGS (H502574-08)

| Chloride, SM4500CI-B | mg | /kg | Analyze | d By: HM | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 736 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #3 SURFACE (H502574-09)

| Chloride, SM4500Cl-B | mg | /kg | Analyze | d By: HM | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 3040 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240 Fax To: (505) 391-4585

| Received: | 09/29/2015 | Sampling Date: | 09/29/2015 |
|-------------------|-------------------|---------------------|----------------|
| Reported: | 10/01/2015 | Sampling Type: | Soil |
| Project Name: | TOMCAT 21 BATTERY | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Judy Garcia |
| Project Location: | LEA COUNTY | | |

Sample ID: SP #3 1' BGS (H502574-10)

| Chloride, SM4500Cl-B | mg | /kg | Analyze | d By: HM | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 576 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #3 2' BGS (H502574-11)

| Chloride, SM4500Cl-B | mg | /kg | Analyze | d By: HM | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 240 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #3 3' BGS (H502574-12)

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: HM | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 5760 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

| ND | Analyte NOT DETECTED at or above the reporting limit |
|-----|---|
| RPD | Relative Percent Difference |
| ** | Samples not received at proper temperature of 6°C or below. |
| *** | Insufficient time to reach temperature. |
| - | Chloride by SM4500Cl-B does not require samples be received at or below 6°C |

Samples reported on an as received basis (wet) unless otherwise noted on report

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

101 East Marland, Hobbs, NM 88240



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

-+

Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

ARDINAL

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28



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October 30, 2015

VERNON BLACK Hungry Horse Environmental P.O. Box 1058 Hobbs, NM 88240

RE: TOMCAT 21 FED #1

Enclosed are the results of analyses for samples received by the laboratory on 10/28/15 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
|------------------|------------------------------|
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240 Fax To: (505) 391-4585

| Received: | 10/28/2015 | Sampling Date: | 10/28/2015 |
|-------------------|------------------|---------------------|----------------|
| Reported: | 10/30/2015 | Sampling Type: | Soil |
| Project Name: | TOMCAT 21 FED #1 | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Judy Garcia |
| Project Location: | LEA COUNTY, NM | | |

Sample ID: SP1 5' BGS (H502831-01)

| Chloride, SM4500Cl-B | oride, SM4500Cl-B mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|-------------------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 576 | 16.0 | 10/30/2015 | ND | 464 | 116 | 400 | 10.9 | |

Sample ID: SP1 7' BGS (H502831-02)

| Chloride, SM4500Cl-B | mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 6130 | 16.0 | 10/30/2015 | ND | 464 | 116 | 400 | 10.9 | |

Sample ID: SP1 8' BGS (H502831-03)

| Chloride, SM4500Cl-B | de, SM4500Cl-B mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|----------------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 7600 | 16.0 | 10/30/2015 | ND | 464 | 116 | 400 | 10.9 | |

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

| ND | Analyte NOT DETECTED at or above the reporting limit |
|-----|---|
| RPD | Relative Percent Difference |
| ** | Samples not received at proper temperature of 6°C or below. |
| *** | Insufficient time to reach temperature. |
| - | Chloride by SM4500Cl-B does not require samples be received at or below 6°C |

Samples reported on an as received basis (wet) unless otherwise noted on report

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Attachment V NMOCD Form C-141 Closure page

Page 6

Oil Conservation Division

| | Page 47 of 95 |
|----------------|---------------|
| Incident ID | nKJ1528146835 |
| District RP | |
| Facility ID | |
| Application ID | |

Closure

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

| <u>Closure Report Attachment Checklist</u> : Each of the following | items must be included in the closure report. | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| \square A scaled site and sampling diagram as described in 19.15.29. | A scaled site and sampling diagram as described in 19.15.29.11 NMAC | | | | | | | |
| Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection) | s of the liner integrity if applicable (Note: appropriate OCD District office | | | | | | | |
| Laboratory analyses of final sampling (Note: appropriate OD | C District office must be notified 2 days prior to final sampling) | | | | | | | |
| Description of remediation activities | | | | | | | | |
| | | | | | | | | |
| and regulations all operators are required to report and/or file certaid may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re- human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regul- restore, reclaim, and re-vegetate the impacted surface area to the co- accordance with 19.15.29.13 NMAC including notification to the C | ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete. Title: <u>Env. Prof.</u> | | | | | | | |
| | | | | | | | | |
| OCD Only | | | | | | | | |
| Received by: | Date: | | | | | | | |
| | of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible /or regulations. | | | | | | | |
| Jocelyn Harimon Closure Approved by: | 07/29/2022 Date: | | | | | | | |
| Printed Name: | | | | | | | | |
| | | | | | | | | |



Remediation Summary and Closure Request

Devon Energy Corporation Tomcat Federal 21 Com #1 Lea County, New Mexico Unit Letter "F", Section 21, Township 23 South, Range 32 East Latitude 32.291682 North, Longitude 103.682428 West NMOCD Incident # nKJ1528146835

Prepared For:

Devon Energy Corporation 6488 Seven Rivers Hwy Artesia, NM 88210

Prepared By:

Hungry Horse, LLC 4024 Plains Hwy Lovington, NM 88260 Office: (575) 393-3386

July 2022

Bradley Wells

Bradley Wells Project Manager bwells@hungry-horse.com

Daniel Dominguez Environmental Manager ddominguez@hungry-horse.com

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| NMOCD Site Classification | 1 |
| Delineation and Remediation Activities | 2 |
| Restoration, Reclamation, and Re-Vegetation | 3 |
| Closure Request | 3 |
| Limitations | 3 |
| Distribution | 4 |

Figures

Figure 1 – Topographic Map Figure 2 – OSE POD Locations Map Figure 3 – USGS Well Locations Map Figure 4 – Sample Location Map

Tables

Table 1 – Summary of Soil Sample Laboratory Analytical Results

Attachments

Attachment I – NMOCD Correspondence Attachment II – Site Photographs Attachment III – Depth to Groundwater

Attachment IV – Laboratory Analytical Reports

Attachment V – NMOCD Form C-141 Closure Page

Received by OCD: 7/29/2022 3:07:03 PM



The following Remediation Summary and Closure Request serves as a condensed update on field activities undertaken at the afore referenced Site.

Background:

The site is located in Unit Letter F (SE/NW), Section 21, Township 23 South, Range 32 East, approximately 32 miles Southwest of Eunice, in Lea County, New Mexico. The property is on Federal land. Topographic Map, OSE POD Locations Map, and USGS Well Locations Map are included as Figure 1, Figure 2, and Figure 3, respectively.

The release occurred on an active tank battery; Latitude 32.291682 North, Longitude 103.682428 West. The Initial NMOCD Form C-141 indicates on April 12, 2015, approximately 135 bbls of produced water overflowed the tanks due to a SCADA pack failure. The release was contained within the unlined containment area. Approximately 130 bbls of produced water were recovered. Previously submitted NMOCD Form C-141 is available on the NMOCD Imaging System. NMOCD Form C-141 Closure page is included as Attachment V. The release event occurred, remediation activities were completed, and closure was accepted before the NMOCD Rule change on August 24, 2018.

NMOCD Site Classification:

A search of the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) groundwater databases was completed in an effort to determine the horizontal distance to known water sources within a half mile radius of the release site. Approximate depth to groundwater was determined using maintained and published water well data. Karst mapping indicates the site is not located in a Karst designated area. Depth to groundwater information is provided as Attachment III and the results are depicted on Figures 2 & 3.

One USGS water well was located within a half mile of the release area, listing depth to water at approximately five hundred fifteen feet bgs. The Lea County Depth to Ground Water map listed depth to water at approximately four hundred feet bgs. At that time the NMOCD allowed use of these maps to estimate depth to water. Depth to water was thus determined to be greater than one hundred feet bgs at this location. Utilizing this information, the NMOCD Recommended Remedial Action Levels (RRAL's) for the Site were determined as follows:

| Depth to Groundwater | Constituent | Method | RRAL |
|-------------------------|-----------------|-----------------------------------|-------------|
| | Chloride | EPA 300.0 or SM4500 CLB | 1,000 mg/kg |
| 1001 | TPH (GRO + DRO) | EPA SW-846 Method 8015M | 5,000 mg/kg |
| >100' | BTEX | EPA SW-846 Methods 8021B or 8260B | 50 mg/kg |
| | Benzene | EPA SW-846 Methods 8021B or 8260B | 10 mg/kg |



Delineation and Remediation Activities:

On September 29, 2015, Hungry Horse conducted an initial site assessment and delineation. Soil samples were collected using hand tools, no mechanical equipment was used. Twelve delineation soil samples were collected from three sample locations, SP1, SP2, and SP3, and were submitted to the laboratory for analysis of chloride.

Laboratory analytical results indicated contaminant concentrations were above the NMOCD delineation requirement of 250 mg/kg in each of the submitted samples, with the exception of SP3 at 2 feet bgs, which exhibited chloride concentration of 240 mg/kg.

On October 6, 2015, the Tomcat 21 Fed 1 Remediation Work Plan Packet was emailed to Kellie Jones at the NMOCD and Shelly Tucker at the BLM. The work plan proposed to hand excavate two feet of impacted material from the area of Sample Point #1 and one foot from the area of Sample Point #3. On October 8, 2015, the proposed work plan was approved by the OCD and BLM. Work plan and email correspondence are provided as Attachment I.

The release area was excavated, via hand tools, according to the approved work plan. Delineation was attempted at SP#1 in an effort to determine, the vertical extent of chloride contamination, and where chloride concentrations were less than or equal to 250 mg/kg. Due to the proximity of tanks and process equipment, delineation was conducted via hand auger. At eight feet below ground surface, auger refusal was encountered due to hard packed caliche. As deeper delineation was not possible, soil samples were collected and submitted to the laboratory for analysis of chloride.

Laboratory analytical results indicated contaminant concentrations were above the NMOCD delineation requirement of 250 mg/kg in each of the submitted samples and were presented to the OCD and BLM. On November 3, 2015, closure approval was given with the stipulation that the incident would remain open until the battery is removed from service. At that time a complete delineation and remediation would be required. Approximately 72 cy of excavated impacted material was transported to an NMOCD approved disposal facility, the excavation was backfilled with clean, non-impacted caliche and brought back to grade. Email correspondence are provided in Attachment I.

However, as the oil and gas industry faced a slowdown in 2016, Devon put a hold on all environmental jobs and related work before a closure report with Final C-141 could be submitted to the NMOCD. In June 2022, Devon requested Hungry Horse prepare for submission this Remediation Summary and Closure Request with NMOCD Form C-141 Closure page.

On May 8, 2020, a Remediation Summary Report Form was received by the NMOCD, however, to date, no response has been received. Report is provided in Attachment I.



A Sample Location Map is provided as Figure 4. A Summary of Soil Sample Laboratory Analytical Results is provided as Table 1 and Laboratory Analytical Reports are provided as Attachment IV. Site Photographs are provided as Attachment II.

Restoration, Reclamation, and Re-Vegetation:

Based upon laboratory analytical results from confirmation soil samples, and with OCD and BLM approval, the excavated area was backfilled and contoured to achieve erosion control and preserve surface water flow. As the affected area is located on an active tank battery, seeding will not be required.

Closure Request:

Remediation activities were conducted in accordance with NMOCD and BLM approved work plan. Soil affected above the NMOCD Recommended Remedial Action Levels has been excavated and hauled to an NMOCD approved disposal facility. Laboratory analytical results from soil samples were accepted by the NMOCD and BLM and closure report with Final C-141 was requested.

Based on laboratory analytical results and field activities conducted to date, Devon Energy Corporation respectfully requests closure be granted for the Tomcat Federal 21 Com #1 location.

Limitations:

Hungry Horse, LLC, has prepared this Remediation Summary and Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended. Hungry Horse has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Hungry Horse has not conducted an independent examination of the facts contained in referenced materials and statements. Hungry Horse has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Hungry Horse notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.



Distribution:

Devon Energy Corporation 6488 Seven Rivers Hwy Artesia, NM 88210

New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 2 506 W. Texas Artesia, NM 88210

New Mexico Bureau of Land Management 620 E Greene St Carlsbad, NM 88220

Figures

Received by OCD: 7/29/2022 3:07:03 PM



Released to Imaging: 7/29/2022 3:28:23 PM

Received by OCD: 7/29/2022 3:07:03 PM



Received by OCD: 7/29/2022 3:07:03 PM





Released to Imaging: 7/29/2022 3:28:23 PM

Table

TABLE 1 Summary of Soil Sample Laboratory Analytical Results Devon Energy Corporation Tomcat Federal 21 Com #1 NMOCD Ref. #: nKJ1528146835

| Sample ID | Date | Depth (ft) | Soil Status | Field Chloride | Benzene (mg/kg) | BTEX (mg/kg) | GRO C ₆ -C ₁₀ (mg/kg) | DRO C ₁₀ -C ₂₈ (mg/kg) | TPH C ₆ -C ₃₆ (mg/kg) | Chloride (mg/kg) |
|-----------------|------------|---------------|-------------|-------------------|--------------------|-----------------|---|--|---|---------------------|
| | 9/29/15 | Surf | Excavated | - | - | - | - | - | - | 4,880 |
| | 9/29/15 | 1 | Excavated | - | - | - | - | - | - | 13,200 |
| | 9/29/15 | 2 | Excavated | - | - | - | - | - | - | 7,760 |
| SP1 | 9/29/15 | 3 | In-Situ | - | - | - | - | - | - | 6,900 |
| | 10/28/15 | 5 | In-Situ | - | - | - | - | - | - | 576 |
| | 10/28/15 | 7 | In-Situ | - | - | - | - | - | - | 6,130 |
| | 10/28/15 | 8 | In-Situ | - | - | - | - | - | - | 7,600 |
| | 9/29/15 | Surf | Excavated | - | - | - | - | - | - | 128 |
| SP2 | 9/29/15 | 1 | Excavated | - | - | - | - | - | - | 576 |
| 372 | 9/29/15 | 2 | In-Situ | - | - | - | - | - | - | 736 |
| | 9/29/15 | 3 | In-Situ | - | - | - | - | - | - | 736 |
| | 9/29/15 | Surf | Excavated | - | - | - | - | - | - | 3,040 |
| 502 | 9/29/15 | 1 | Excavated | - | - | - | - | - | - | 576 |
| SP3 | 9/29/15 | 2 | In-Situ | - | - | - | - | - | - | 240 |
| | 9/29/15 | 3 | In-Situ | - | - | - | - | - | - | 5,760 |
| NMOCD Recommend | ed Remedia | Action | Levels | | 10 | 50 | - | - | 5,000 | 1,000 |

Attachment I NMOCD Correspondence

| Rec ed y (D) 1/29/2022 3:07:03 PM | APPROVED Conditional Page 62 of 9. |
|---|------------------------------------|
| By Kellie Jones at 11:16 am, Oct 08, 2015 | |
| παΝΥ | RY HOKSE, LLC |

3709 S. Eunice HWY P.O. Box 1058 Hobbs, NM 88241 Office: 575-393-3386 Fax: 575-391-4585 info@hungry-horse.com DIRT WORK * ON-SITE REMEDIATION SOIL TESTING * EXCAVATION * ELECTRICAL Please to vertical delineate SP1 to 250 ppm chlorides.
 Ensure BLM approval/ concurrence.

60ct15

To: Kellie Jones, New Mexico Oil Conservation Division Shelly Tucker, Bureau of Land Management Reference: Remediation Work Plan Operator: Devon Energy Production Company Location: Tomcat 21 Fed 1 API: 30-025-33356 Legals: UL. F, Sec. 21, T23S, R32E GPS: 32.2927 -103.6815

Site Information

This site is located in Lea County, New Mexico approximately 3.6 miles north of the intersection of New Mexico Highway 128 and Red Road and 3.5 miles east of Red Road. Based upon the New Mexico State Engineer's website, there is one water well in the area with a depth to groundwater of 400'. The Lea County Depth to Groundwater Map indicates the same depth to groundwater.

This battery is an active and working site. The produced water release that occurred on 12Apr15, had no impact outside the berms of the battery. All fluid released, remained inside the earthen berms.

Work Conducted to Date

A delineation was conducted by use of hand tools on 29Sept15. Due to safety concerns, no mechanical equipment was used. Soil samples were obtained at three sample points from the surface to 3' below ground surface (BGS). Lab analysis was conducted for Chlorides. (See attached map with sample points and lab results.)

Proposed Remediation

Based upon the delineation results, depth to ground water, and the safety concerns of working inside a battery, I propose to hand excavate 2' of impacted material from the area of Sample Point #1 and 1' from the area of Sample Point #3. This encompasses the area between and on both side of the tanks. A complete delineation and remediation will be conducted at the time the facility is shut in and taken out of service.

All impacted material will be transported to a division approved facility for disposal. The battery will then be backfilled with fresh material.

Sincerely,

Vernon K. Black, Hungry Horse, LLC

Remediation Summary Report Form

General Information

This report prepared by Hungry Horse, LLC on 5Nov15, is in response to the release for Devon Energy Production at the Tomcat 21 Fed #1 Battery, located in rural Lea County, New Mexico, for the release that occurred 12Apr15, due to equipment failure.

| Date: 5Nov15 | | | | |
|-------------------------------|---------------------------|---------------------------|-----------------------------|-------|
| Client: Devon Energy P | | | | |
| Site Name: Tomcat 21 | Fed #1 | County: Lea | State: New Mexico | |
| API: 30-025-33356 | | | | |
| Site Coordinates | Latitude: 32.2927 | | | |
| | Longitude: -103.6815 | | | |
| Surface Owner: BLM | | | | |
| | | | | |
| Release Description ar | nd Assessment | | | |
| Date of Spill: 12Apr15 | | | | |
| Type of Spill: Oil | X Produced Water | Condensate Othe | r (Specify): | ı |
| | ipment Failure Valve | Failure Line Rupture | Leaking Tank X Tank Overfil | i |
| | r (Specify): | | | |
| Other Contributing Fac | ctors or Comments: N/A | | | |
| Quantity Spilled: 135 h | | ity Recovered: 130 bbls | Total Released: 5 bbls | |
| | X Vacuum Truck | | | Z NI- |
| New Mexico Oil Conse | ervation Division Notifie | | Completed and Submitted: X | |
| Spill Area Impacted: | X Inside Firewall | On Production Pad | | .and |
| | | ng outside of firewall wa | s impacted | |
| Total Square Foot Imp | acted: 3800 Estima | ated Depth: 1' | Volume (Cu. Yards): 75 | |
| Other Comments: Not | hing outside of firewall | was impacted | | |
| | | | | |

Remediation Activity Summary

The remediation work plan was executed as approved by both NM OCD and BLM. Approximately one foot of impacted soil was removed from the impacted areas except for the area around Sample Point #1 where 2' of impacted soil was removed. As per the approved work plan, further delineation was conducted at SP #1 to try and determine the point at which Chlorides reached 250 ppm of less. Due to safety concerns, this further delineation was conducted by use of a hand auger. At eight foot below ground surface, auger refusal was encountered due to hard packed caliche. Soil samples were collected and lab analysis conducted. Results, which did not reach the 250 ppm goal, were resented to NM OCD and BLM. Due to safety concerns further delineation was not practical. Closure approval was given with the stipulation that the RP would remain open until such time the battery is removed from service and a full delineation and remediation is completed. All impacted material was transported to a division approved disposal facility and the excavated battery was backfilled with fresh caliche and brought back to grade.

Vernon K. Black, Hungry Horse, LLC

Vernon Black

From:Vernon BlackSent:Tuesday, November 03, 2015 9:28 AMTo:Kellie Jones (kellie.jones@state.nm.us)Cc:Shelly J. Tucker (stucker@blm.gov); Brett Fulks (Brett.Fulks@dvn.com)Subject:Tomcat 21 Fed #1 Battery

Kellie,

Thanks for taking the time to meet with me this morning concerning the work at the above referenced location. I and my customer, Devon Energy Production, understand the NM OCD requirement for determining the depth at which Chlorides reach a level of 250 ppm or less. However, as we discussed it is a serious safety concern to try using equipment, other than hand tools, to determine the point at which the Chlorides reach this level inside the battery. We appreciate you taking this into consideration and will proceed, as you approved, to backfill the excavated site with the stipulation that the RP will remain open until such time the battery is removed from service. At that time a complete delineation/remediation will be performed.

Thanks for your help,

Vernon K. Black Hungry Horse, LLC PO Box 1058 Hobbs, NM 88241 575-393-3386 office 575-631-2253 cell

Vernon Black

| From: | Tucker, Shelly <stucker@blm.gov></stucker@blm.gov> |
|----------|--|
| Sent: | Tuesday, November 03, 2015 9:59 AM |
| To: | Vernon Black |
| Cc: | Kellie Jones (kellie.jones@state.nm.us); Brett Fulks (Brett.Fulks@dvn.com) |
| Subject: | Re: Tomcat 21 Fed #1 Battery |

Thank you for the information. I will note this in my records.

The BLM approval/acceptance does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

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

Sincerely,

Shelly J Tucker

Environmental Protection Specialist Bureau of Land Management

620 E. Greene St Carlsbad, NM 88220

575.234.5905 - Direct 575.361.0084 - Cellular

stucker@blm.gov

×

On Tue, Nov 3, 2015 at 9:28 AM, Vernon Black <<u>vblack@hungry-horse.com</u>> wrote:

Kellie,

Thanks for taking the time to meet with me this morning concerning the work at the above referenced location. I and my customer, Devon Energy Production, understand the NM OCD requirement for determining the depth at which Chlorides reach a level of 250 ppm or less. However, as we discussed it is a serious safety concern to try using equipment, other than hand tools, to determine the point at which the Chlorides reach this level inside the battery. We appreciate you taking this into consideration and will proceed, as you approved, to backfill the

excavated site with the stipulation that the RP will remain open until such time the battery is removed from service. At that time a complete delineation/remediation will be performed.

Thanks for your help,

Vernon K. Black

Hungry Horse, LLC

PO Box 1058

Hobbs, NM 88241

575-393-3386 office

575-631-2253 cell

| V | e | rn | 0 | n | Bl | a | ck | (|
|---|---|----|---|---|----|---|----|---|
| • | - | | - | | _ | - | | |

| Jones, Kellie, EMNRD <kellie.jones@state.nm.us> Thursday, October 08, 2015 1:21 PM Vernon Black; Shelly J. Tucker (stucker@blm.gov) Reggie Brooks; Terry Smith RE: Devon-Tomcat 21 Fed 1 Battery</kellie.jones@state.nm.us> |
|---|
| RE. Devon-Tomcat 21 Fed I battery |
| |

Vernon,

Here is information on the recent submittal.

| 3902 | 10/8/2015 | A | Devon | Tomcat 21 Battery | 23S 32E 21 F | 30 025 33356 | 4, |
|------|-----------|---|-------|-------------------|--------------|--------------|----|
| 3302 | 10/0/2010 | | | | | | |

The work plan is conditionally approved, with the condition of complete vertical delineation at the site down to 250 ppm chlorides.

If you have any questions, please feel free to contact me.

Kellie Jones Environmental Specialist, District 1 Oil Conservation Division, EMNRD 575-393-6161 ext. 111 575-370-3180 (emergency-cell) E-Mail: kellie.jones@state.nm.us

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Vernon Black [mailto:vblack@hungry-horse.com] Sent: Wednesday, October 07, 2015 10:21 AM To: Jones, Kellie, EMNRD; Shelly J. Tucker (stucker@blm.gov) Cc: Reggie Brooks; Terry Smith Subject: Devon-Tomcat 21 Fed 1 Battery

Kellie,

Thanks for taking the time to meet with me this morning to discuss the work plan for the above referenced site. As per our conversation, we'll proceed with the remediation plan as approved with the stipulation for further delineation at SP #1. We'll conduct further sampling/analysis at this point and provide you the results.

Shelly, for your review.

Thanks for all your help, Vernon K. Black Hungry Horse, LLC PO Box 1058

.

Hobbs, NM 88241 575-393-3386 office 575-631-2253 cell

Vernon Black

| From: | Tucker, Shelly <stucker@blm.gov></stucker@blm.gov> |
|----------|---|
| Sent: | Thursday, October 08, 2015 10:30 AM |
| To: | Vernon Black |
| Cc: | Kellie Jones (kellie.jones@state.nm.us); Reggie Brooks; Terry Smith |
| Subject: | Re: Devon-Tomcat 21 Fed 1 Battery |

Vernon,

The BLM accepts/approves your proposed work plan - with concurrence of NMOCD stipulation of full delineation at SP1

The BLM approval/acceptance does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

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

Sincerely,

Shelly J Tucker Environmental Protection Specialist Bureau of Land Management

620 E. Greene St Carlsbad, NM 88220

575.234.5905 - Direct 575.361.0084 - Cellular

stucker@blm.gov

×

On Wed, Oct 7, 2015 at 10:21 AM, Vernon Black <<u>vblack@hungry-horse.com</u>> wrote:

Kellie,

Thanks for taking the time to meet with me this morning to discuss the work plan for the above referenced site. As per our conversation, we'll proceed with the remediation plan as approved with the stipulation for further delineation at SP #1. We'll conduct further sampling/analysis at this point and provide you the results.

Shelly, for your review.

Thanks for all your help,

Vernon K. Black

Hungry Horse, LLC

PO Box 1058

Hobbs, NM 88241

575-393-3386 office

575-631-2253 cell

Attachment II Site Photographs


















Attachment III Depth to Groundwater

WELLS WITH WELL LOG INFORMATION

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

| | | | | No wells found. |
|---------------------------|---------------------------------|----------------------|--|---|
| UTMNAD83 Ra | <u>dius Search (in meters):</u> | | | |
| Easting (X): | 624060.85 | Northing (Y): | 3573529.32 | Radius: 805 |
| | | | | |
| particular purpose of the | | by the recipient wit | h the expressed understanding that the | e OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any |

7/27/22 10:36 AM



anal Water

Click to hideNews Bulletins

 Explore the NEW LISGS
Eul News interactive map to access real-time water data from over 13,500 stations nationwide

Water Quality Samples for the Nation To view additional data-quality attributes, output the results using these options: one result per row, expanded attributes. Additional precoutions are here.

em: Web Interface

USGS 321735103402501 235 32E 21 241A

Available data for the site. Ware-Date, Pelaka hensela v @0 Lee Courty, New Mexico Mydrologic Linit Code 33660011 Latitude 32º17357, Lengitude 1034025* NAD22 Latitude 32º17357, Lengitude 1034025* NAD22 Latitude 32º17357, Lengitude 1034025* NAD27 Linit wells completed in the Other aguifes (XM990(CT115) Red) aquifer.



| | Water Quality Remark Code | Description |
|---|---|-------------------------------------|
| | | |
| | м | Pissone verified but not quantified |
| | | |
| 8 | Juestions about sites/data? eedback on this web site | |

U.S. Department of the Interior U.S. Geological Survey Title: Water Quality Samples for USA: Sample Data URL: https://wwisewaterdata.usgr-med/multi/

Page Contact Information: USGS Water Data Su Page Last Hed Red: 2022-07-27 16:50:23 EDT 234 5-11 saved1

USA.gov

Bata Catalogram Weber Quality V United States V 000

Attachment IV Laboratory Analytical Reports



October 01, 2015

VERNON BLACK Hungry Horse Environmental P.O. Box 1058 Hobbs, NM 88240

RE: TOMCAT 21 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 09/29/15 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
|------------------|------------------------------|
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240 Fax To: (505) 391-4585

| Received: | 09/29/2015 | Sampling Date: | 09/29/2015 |
|-------------------|-------------------|---------------------|----------------|
| Reported: | 10/01/2015 | Sampling Type: | Soil |
| Project Name: | TOMCAT 21 BATTERY | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Judy Garcia |
| Project Location: | LEA COUNTY | | |

Sample ID: SP #1 SURFACE (H502574-01)

| Chloride, SM4500Cl-B mg/kg | | Analyzed By: HM | | | | | | | |
|----------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 4880 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #1 1' BGS (H502574-02)

| Chloride, SM4500Cl-B mg/kg | | | Analyze | | | | | | |
|----------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 13200 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #1 2' BGS (H502574-03)

| Chloride, SM4500Cl-B | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 7760 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #1 3' BGS (H502574-04)

| Chloride, SM4500Cl-B mg/kg | | Analyzed By: HM | | | | | | | |
|----------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 6900 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

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*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240 Fax To: (505) 391-4585

| Received: | 09/29/2015 | Sampling Date: | 09/29/2015 |
|-------------------|-------------------|---------------------|----------------|
| Reported: | 10/01/2015 | Sampling Type: | Soil |
| Project Name: | TOMCAT 21 BATTERY | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Judy Garcia |
| Project Location: | LEA COUNTY | | |

Sample ID: SP #2 SURFACE (H502574-05)

| Chloride, SM4500Cl-B mg/kg | | Analyzed By: HM | | | | | | | |
|----------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 128 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #2 1' BGS (H502574-06)

| Chloride, SM4500Cl-B mg/kg | | | Analyze | Analyzed By: HM | | | | | |
|----------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 576 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #2 2' BGS (H502574-07)

| Chloride, SM4500Cl-B | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 736 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #2 3' BGS (H502574-08)

| Chloride, SM4500CI-B | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 736 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #3 SURFACE (H502574-09)

| Chloride, SM4500Cl-B | loride, SM4500Cl-B mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------------------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 3040 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

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*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240 Fax To: (505) 391-4585

| Received: | 09/29/2015 | Sampling Date: | 09/29/2015 |
|-------------------|-------------------|---------------------|----------------|
| Reported: | 10/01/2015 | Sampling Type: | Soil |
| Project Name: | TOMCAT 21 BATTERY | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Judy Garcia |
| Project Location: | LEA COUNTY | | |

Sample ID: SP #3 1' BGS (H502574-10)

| Chloride, SM4500Cl-B mg/kg | | Analyzed By: HM | | | | | | | |
|----------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 576 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #3 2' BGS (H502574-11)

| Chloride, SM4500Cl-B | ride, SM4500Cl-B mg/kg | | | Analyzed By: HM | | | | | |
|----------------------|------------------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 240 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

Sample ID: SP #3 3' BGS (H502574-12)

| Chloride, SM4500Cl-B | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 5760 | 16.0 | 09/30/2015 | ND | 416 | 104 | 400 | 0.00 | |

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

| ND | Analyte NOT DETECTED at or above the reporting limit |
|-----|---|
| RPD | Relative Percent Difference |
| ** | Samples not received at proper temperature of 6°C or below. |
| *** | Insufficient time to reach temperature. |
| - | Chloride by SM4500Cl-B does not require samples be received at or below 6°C |

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

101 East Marland, Hobbs, NM 88240



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Received by OCD: 7/29/2022 3:07:03 PM

ARDINAL

aboratories

Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

-+

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aboratories



October 30, 2015

VERNON BLACK Hungry Horse Environmental P.O. Box 1058 Hobbs, NM 88240

RE: TOMCAT 21 FED #1

Enclosed are the results of analyses for samples received by the laboratory on 10/28/15 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
|------------------|------------------------------|
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240 Fax To: (505) 391-4585

| Received: | 10/28/2015 | Sampling Date: | 10/28/2015 |
|-------------------|------------------|---------------------|----------------|
| Reported: | 10/30/2015 | Sampling Type: | Soil |
| Project Name: | TOMCAT 21 FED #1 | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Judy Garcia |
| Project Location: | LEA COUNTY, NM | | |

Sample ID: SP1 5' BGS (H502831-01)

| Chloride, SM4500Cl-B | ide, SM4500Cl-B mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|-----------------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 576 | 16.0 | 10/30/2015 | ND | 464 | 116 | 400 | 10.9 | |

Sample ID: SP1 7' BGS (H502831-02)

| Chloride, SM4500Cl-B | mg | /kg | Analyzed By: AP | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 6130 | 16.0 | 10/30/2015 | ND | 464 | 116 | 400 | 10.9 | |

Sample ID: SP1 8' BGS (H502831-03)

| Chloride, SM4500Cl-B | mg | /kg | Analyzed By: AP | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 7600 | 16.0 | 10/30/2015 | ND | 464 | 116 | 400 | 10.9 | |

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

| ND | Analyte NOT DETECTED at or above the reporting limit | |
|-----|---|--|
| RPD | Relative Percent Difference | |
| ** | Samples not received at proper temperature of 6°C or below. | |
| *** | Insufficient time to reach temperature. | |
| - | Chloride by SM4500Cl-B does not require samples be received at or below 6°C | |

Samples reported on an as received basis (wet) unless otherwise noted on report

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Attachment V NMOCD Form C-141 Closure page

Page 6

Oil Conservation Division

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. | | | | |
|--|---|--|--|--|
| \square A scaled site and sampling diagram as described in 19.15.29. | 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 nust 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: Dale Woodall Title: Env. Prof. Signature: Dale Woodall Date: | | | | |
| | | | | |
| 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: | | | |
| | | | | |

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

| Operator: | OGRID: |
|-------------------------------------|---|
| DEVON ENERGY PRODUCTION COMPANY, LP | 6137 |
| 333 West Sheridan Ave. | Action Number: |
| Oklahoma City, OK 73102 | 129856 |
| | Action Type: |
| | [C-141] Release Corrective Action (C-141) |

CONDITIONS

Created By Condition Condition Date 7/29/2022 jharimon None

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CONDITIONS

Action 129856