

Incident ID	NMR2012853960
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	~167 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

### **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.

Form C-141

State of New Mexico  
Oil Conservation Division

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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: James Smith Title: HSE-Regulatory Supervisor

Signature:  Date: 11/4/20

email: jsmith@foundationenergy.com Telephone: 918-526-5592

**OCD Only**

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

Form C-141

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## 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: James Smith

Title: HSE-Regulatory Supervisor

Signature: 

Date: 11/4/20

email: jsmith@foundationenergy.com

Telephone: 918-526-5592

**OCD Only**

Received by: Chad Hensley

Date: 02/18/2021

☐ Approved☒ Approved with Attached Conditions of Approval☐ Denied☐ Deferral ApprovedSignature: 

Date: 02/18/2021



September 28, 2020

James Smith  
HSE/Regulatory Supervisor  
Foundation Energy Management, LLC  
15 E 5th Street  
Tulsa, OK 74103

**Re: Site Delineation Summary, and Proposed Remediation Plan and Deferral Request**  
**Tulk VV State #002**  
**API No. 30-025-28437**  
**GPS: Latitude 33.07348 Longitude -103.71678**  
**UL "N", Sec. 11, T14S, R33E**  
**Lea County, NM**  
**NMOCD Ref. No. NRM20112853960**

Tasman Geosciences, LLC (Tasman), on behalf of Foundation Energy Management, LLC (Foundation), has prepared this Site Delineation Summary, and Proposed Remediation Plan and Deferral Request for the Release Site known as the Tulk VV State #002. Details of the release are summarized below:

RELEASE DETAILS				
Type of Release: Produced Water		Volume of Release: 178 bbls		
		Volume Recovered: 0 bbls		
Source of Release: Tank Battery		Date of Release: 4/24/20	Date of Discovery: 4/24/20	
Was Immediate Notice Given?	Yes	If, YES, to Whom?		NMOCD
Was a Watercourse Reached?	No	If YES, Volume Impacting the Watercourse:		N/A
Surface Owner: State		Mineral Owner:	State	
Describe Cause of Release and Remedial Action Taken:				
Internal corrosion caused the recirculation line nipple on the back of the fiber water tank to fail. The recirculation line valve completely separated from the nipple resulting in loss of total tank fluids within the containment berm. Upon discovery of the line valve separation and loss of produced water from the tank, there was no free liquids present in the containment berm encircling the tank battery. Foundation is requesting a "Deferral" to remediation because the tank battery remains activities and the release materials remain immediately under or around production equipment that continues to be active.				

A Site Characteristics Map (Figure 1) is provided as Attachment #1. General Site Photographs are provided as Attachment #8. A copy of the Initial Release Notification and Corrective Action (NMOCD Form C-141) is provided as Attachment #9.

## REGULATORY FRAMEWORK

Surface impacts from unauthorized releases of crude oil, gases, produced water, condensate or other oil field waste which occur during normal oilfield operations are generally regulated by the New Mexico Oil Conservation Division (NMOCD) in accordance with 19.15.29 of the New Mexico Administrative Code (NMAC). 19.15.29 NMAC establishes reporting, site assessment/characterization, remediation, closure, variance and enforcement procedures. Table I of 19.15.29.12 NMAC determines the closure criteria for soils impacted by a release based on the depth to groundwater and the following site characteristics:

Site Characteristics	
Approximate Shallowest Depth to Groundwater beneath area affected by the release	<b>~167 feet bgs</b>
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 ft. of any continuously flowing or significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 200 ft. of any lakebed, sinkhole, or playa lake?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 ft. of an occupied permanent residence, school, hospital, institution or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 500 ft. of a spring or private domestic fresh water well?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 1,000 ft. of any fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 ft. of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas NOT on an exploration, development, production or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

A search of a groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) was conducted to determine the average depth to groundwater within a 1/2 Mile radius of the Release Site and to identify any registered water wells within one (1) Mile of the Release Site. A total of two (2) water wells were identified within a 1/2 mile radius of the release Site and the average, minimum and maximum depths to groundwater, were estimated to be 187 feet, 167 feet and 208 feet, respectively. A total of four (4) wells were identified within one (1) Mile of the Site. In addition, a Lea County depth to groundwater map prepared by Chevron/Texaco (2/9/2005) was referenced to estimate and crosscheck the approximate depth to groundwater beneath the Site. Well construction and depth to groundwater information for wells within 1/2 mile of Site is provided as Attachment #5.

Based on the approximate depth to groundwater and site characteristics, the NMOCD Closure Criteria are as follows:

Table 1 - Closure Criteria for Soils Impacted by a Release (NMOCD)			
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
> 100 feet	Chloride***	EPA 300.0 or SM 4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

## SITE DELINEATION

On June 24, 2020, Tasman personnel were on site conducting site delineation activities. Four investigative soil borings (SB-1, SB-2, SB-3 and SB-4) were advanced at the site in an effort to delineate the horizontal and vertical extent of soil impacts within the secondary containment berm of the Tank Battery. Soil boring SB-1 was advanced to a total depth (TD) of 20 feet below ground surface (bgs) and soil borings SB-2, SB-3 and SB-4 were advanced to a TD of 15 feet bgs. Groundwater was not encountered during field investigation activities. Soil samples were collected at regular intervals and field tested for chlorides using a Silver Nitrate Kit and volatile organic compounds (VOCs) using a photo-ionization detector (PID). The location of the soil borings advanced at the site are illustrated on the Figure 2 provided as Attachment #2. Soils descriptions of each investigative boring were logged and recorded on the Borehole Logging Forms provided in Attachment #4. A table summarizing the soil samples collected from each investigative soil boring and field screening results is presented below as Table 2.

Table 2 - Summary of Field Screening Results								
Boring ID:	SB1		SB2		SB3		SB4	
Latitude:	33.07347		33.073471		33.073425		33.073415	
Longitude:	-103.716691		-103.71683		-103.716756		-103.716649	
Depth (ft)	Chlorides (mg/kg)	PID	Chlorides (mg/kg)	PID	Chlorides (mg/kg)	PID	Chlorides (mg/kg)	PID
1	2047	1.2	269	1.3	24306	0.5	22419	0.9
5	150	1	148	0.9	764	3.8	1090	0.8
10	89	0.3	86	0.5	433	1.8	201	1.3
15	-	-	-	-	113	1.5	209	1.1

Notes:

Photo-ionization Detector (PID) used to measure total volatile organics.

A Silver Nitrate Kit was used to measure chlorides.

mg/kg - milligrams per kilograms

Representative soil samples (including "Surface", 5 feet, 10 feet, and 15 feet [SB-3 and SB-4 only]) were collected from each investigative boring and submitted to a commercial laboratory for analysis of chlorides; total petroleum hydrocarbon (TPH); and benzene, toluene, ethylbenzene and xylenes (BTEX) concentrations. Select soil samples were placed on hold at the commercial laboratory and only analyzed if requested by Foundation. Laboratory analytical results indicated chlorides concentrations were below the NMOCD Closure Criteria in the analyzed soil samples with the exception of SB-3 @ Surface and SB-4 @ Surface, which exhibited concentrations of 43,200 and 28,800 mg/kg, respectively. Analytical results for TPH and BTEX were below laboratory reporting limits and NMOCD Closure Criteria for all the soil samples analyzed. A table (Table 3) summarizing laboratory analytical results from soil samples collected from investigative borings and analyzed by the laboratory is provided as Attachment #6. Laboratory analytical reports are provided as Attachment #7.

## REMEDIAL PLAN AND DEFERRAL REQUEST

Based on laboratory analytical results, site characteristics, and field observations made during the Site delineation activities, remediation of shallow soils (surface soil samples collected from SB-3 and SB-4) impacted with elevated chloride concentrations above the NMOCD - NMAC Closure Criteria of 20,000 mg/kg is required. Foundation understands that remediation at the site is required however, at this time, is requesting the Division's written approval for "**Remediation Deferral**" based on the following: 1) the release has occurred at an active tank battery within the encircling perimeter soil berm, and contamination is located in areas immediately adjacent and/or under production tanks and piping where remediation could cause a major facility desctruction, 2) the contamination has been fully delineated and remains within the tank battery encircling perimeter berm (as described above as part of the site delineation), and 3) does not pose an imminent risk to human health, the environment or groundwater. When the site is no longer used for oil and gas operation or the equipment is removed as a result of other operations, Foundation will likely implement remediation and reclamation concurrently in accordance with 19.15.29.12 and 19.15.29.13 NMAC and as described in the remediation plan below:

- Perform utility locates and clearances. Setup Site erosion and sediment controls and laydown areas.
- Remove contents from production equipment and decontaminate including tanks, piping, etc. Dispose of contents off-site. Dismantle production equipment and remove from site.
- Based on the Site delineation results, the elevated chloride concentrations above the NMOCD - NMAC Closure Criteria of 20,000 mg/kg were present in the surface soils (top one foot) in borings SB-3 and SB-4 and decreased in concentration with depth as defined by samples collected at 5 feet bgs in these borings (SB-3 @ 5' was 768 mg/kg, and SB-4 @ 5' was 1,300 mg/kg). Chloride concentrations in soil borings SB-1 and SB-2, were well below the NMOCD - NMAC Closure Criteria of 20,000 mg/kg. Chloride concentrations in soil samples collected at the surface and/or at 5 feet bgs from borings SB-1, SB-3 and SB-4 were above 600 mg/kg which is the reclamation criteria defined by 19.15.29.13 NMAC in which a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg must be achieved. BTEX

and TPH concentrations are below laboratory reporting limits and NMOCD - NMAC Closure Criteria. Therefore, Foundation anticipates that Site remediation of chloride impacted soil will be driven by the reclamation criteria of 600 mg/kg to a depth of 4 feet bgs and the total co-located area is estimates to be 2,750 square feet to a depth of 4 feet of chloride impacted soil (estimated to be approximately 260 cubic yards of soil) to be removed (Refer to Figure 3 provided in Attachment #3).

- Utilizing mechanical equipment, excavate impacted soil within the release area generally defined by the encircling containment berms for the tank battery and generally characterized by sample points SB-1, SB-2, SB-3 and SB-4 to a depth of four feet bgs (reclamation depth as defined for by 19.15.29.13 NMAC), or until laboratory analytical results from confirmation soil samples collected in the bottom of the excavation indicate concentrations of chlorides are below the NMOCD - NMAC Closure Criteria of 20,000 mg/kg beneath the reclamation depth of four feet.
- Excavated soil will be direct loaded into haul trucks or temporarily stockpiled on-site, on top of a poly liner, pending transportation under manifest to a NMOCD-approved disposal facility.
- Upon receiving favorable laboratory analytical results from confirmation soil samples (below the NMOCD-NMAC Closure Criteria of 20,000 mg/kg beneath the reclamation depth of four feet) excavated areas will be backfilled with locally sourced, non-impacted "like" material, at or near original relative positions. The backfilled area will be contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow to the maximum extent practicable.
- In accordance with 19.15.29.12, at the completion of the remediation activities as well as the reclamation activities, Foundation will prepare a closure report with form C-141 within 90 days of initiating the remedial activities.

### SAMPLING PLAN

Upon completion of remediation and reclamation activities, representative five-point composite excavation confirmation soil samples will be collected from the base and sidewalls of the excavated areas representing an area of no more than 200 square feet (anticipated to be approximately 14 samples). Prior to conducting final confirmation sampling at the Site, Foundation will verbally notify the Division District Office sampling efforts at least two business days before the event. The soil samples will be sent to a commercial laboratory and analyzed for chloride concentrations following SM4500CL-B method. A Proposed Remediation Map (Figure 3) is provided as Attachment #3.

## TIMELINE AND ESTIMATED VOLUME OF SOIL TO BE REMEDIATED

As described above, Foundation is requesting the Division's written approval for deferring remediation at the site as defined in the requirements set forth in 19.15.29.12 C. (2) NMAC. Foundation believes that this Site meets the deferral requirements and as such proposes that when the site is no longer used for oil and gas operation or the equipment is removed as a result of other operations, site remediation and reclamation will be performed in concurrently accordance with 19.15.29.12 and 19.15.29.13 NMAC and as described in the remediation plan above. Remediation and reclamation activities will be completed within 90 days of removing the tank battery from operation. Based on laboratory analytical results, site characteristics, field observations made during the initial site assessment and as described above, it is estimated approximately 260 cubic yards of soil will be remediated (soil with chloride concentrations above the 20,000 mg/kg NMOCD - NMAC Closure Criteria) and/or removed as part of the reclamation process (soil with chloride concentrations above the NMOCD - NMAC Reclamation Criteria of 600 mg/kg within the top 4 feet at the site).

## RESTORATION, RECLAMATION AND RE-VEGETATION

Areas affected by the release, and remediation and reclamation activities will be substantially restored to the condition which existed prior to the release to the maximum extent practicable. Excavated areas will be backfilled with locally sourced, non-impacted "like" material from a minimum of four feet bgs or bottom of the excavation to the original relative ground surface. The top layer soil cover will either consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the Site. The affected area will be contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow to the extent practicable and re-vegetated in accordance with 19.15.29.13 NMAC.

If you have any questions, or if additional information is required, please feel free to contact either of the undersigned by phone or email.

Respectfully,

Kyle Norman  
Regional Project Manager

<b>Attachments:</b>	Attachment #1- Attachment #2- Attachment #3- Attachment #4- Attachment #5- Attachment #6- Attachment #7- Attachment #8- Attachment #9-	Figure 1 - Site Characteristics Map Figure 2 - Soil Bore Location Map Figure 3 - Proposed Remediation Map Soil Boring Logs Depth to Groundwater Data Table 3 - Summary of Soil Laboratory Analytical Results Laboratory Analytical Reports General Site Photographs Release Notification and Corrective Action (FORM C-141)
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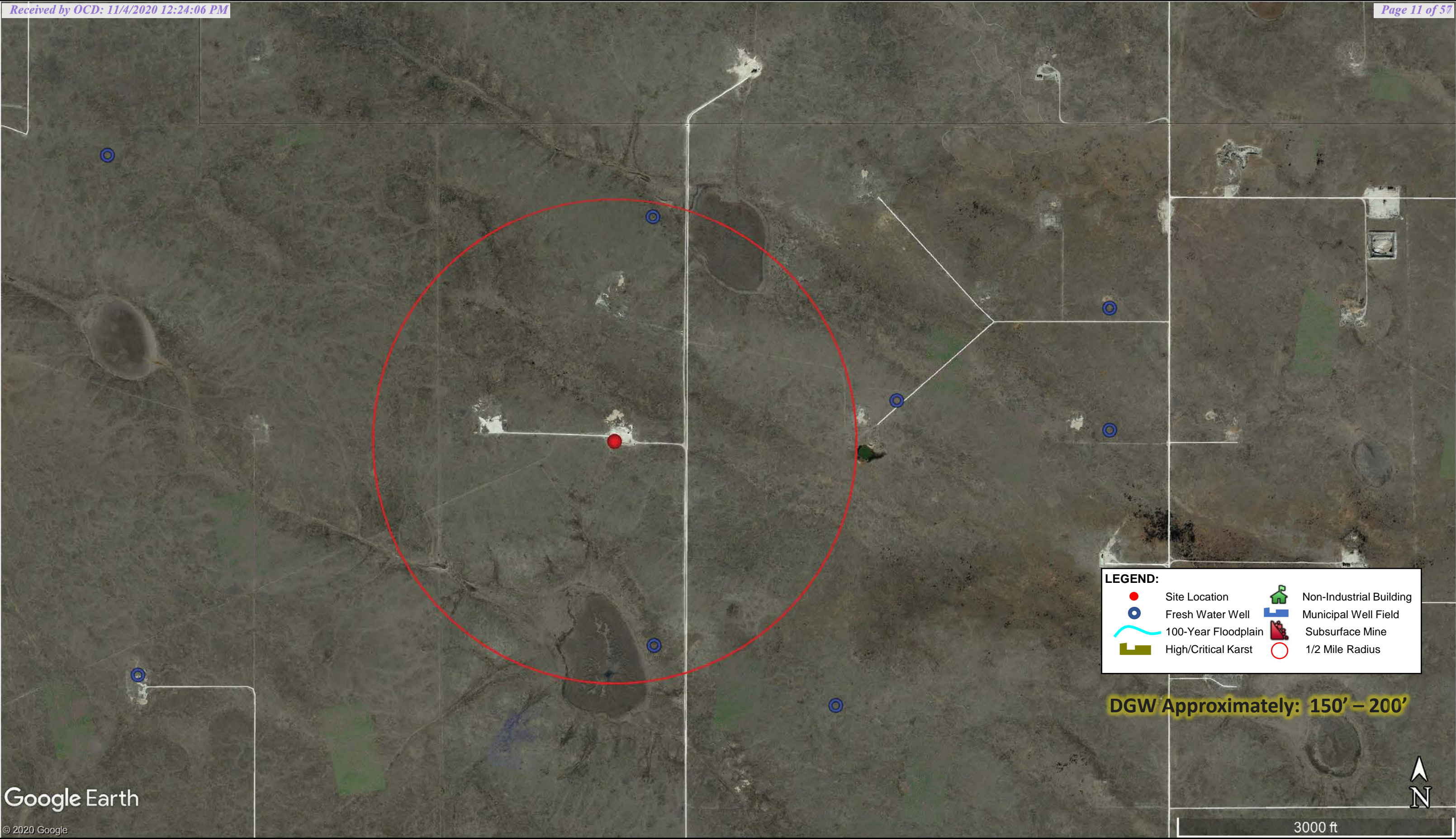


**ATTACHMENTS**

**Attachment #1**

**Figure 1 – Site Characterization Map**





DATE: May 2020
DESIGNED BY : KN
DRAWN BY: KN <small>Released to Imaging: 2/18/2021 9:18:53 AM</small>



**TASMAN**  
GEOSCIENCES

*Tasman Geosciences, Inc.*  
**2620 W. Marland Blvd.**  
**Hobbs, NM 88240**

**Foundation Energy**  
**Tulk VV State 2**  
GPS: 33.073471, -103.716693  
UL "K", Section 28, Township 14 South, Range 32 East  
Lea County, New Mexico

Site Characteristics  
Map

**Figure**  
**1**



**Attachment #2**

**Figure 2 – Soil Boring Location Map**



Legend:

- Approximate Extent of Encircling Soil Berm
- SB-1 Approximate Location of Soil Boring and Designation



Google Earth

© 2020 Google

DATE: September 2020	 <div><b>TASMAN</b> GEOSCIENCES</div> <div><i>Tasman Geosciences, Inc.</i> 2620 W. Marland Blvd. Hobbs, NM 88240</div>	<b>Foundation Energy Management, LLC</b> Tulk VV State #2 Tank Battery GPS: 33.073477, -103.716779 Lea County, New Mexico	Soil Boring Location	<b>Figure</b> <b>2</b>
DESIGNED BY : CEM				
DRAWN BY: CEM				



**Attachment #3**

**Figure 3 – Proposed Remediation Map**



Legend:

- Approximate Extent of Encircling Soil Berm
- SB-1 Approximate Location of Soil Boring and Designation
- Approximate Extent of Soils Impacted above 20,000 mg/kg of Chloride (NMOC Closure Criteria based on Groundwater Depth > 100 feet bgs)
- Approximate Extent of Soils Impacted above 600 mg/kg of Chloride (NMOC Reclamation Criteria for soil to a depth of 4 feet bgs)

NOTES:

1. Foundation is requesting written District approval for deferral of Remediation until the Site is no longer being used for oil and gas operations (19.15.29.12 NMAC).
2. Remediation Area is co-located within the Reclamation Area which requires removal of non-waste containing, uncontaminated, earthen materials to a depth of 4 feet (Total estimated area of soil to removed - approximately 1750 square feet by a depth of 4 feet [260 cubic yards]).
3. Restoration, reclamation and re-vegetation of the entire tank battery site will also be performed in accordance with 19.15.29.13 NMAC) when shuttered.

Google Earth

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90 ft

DATE: September 2020

DESIGNED BY : CEM

DRAWN BY: CEM

Released to Imaging: 2/18/2021 9:18:53 AM



Tasman Geosciences, Inc.  
2620 W. Marland Blvd.  
Hobbs, NM 88240

Foundation Energy Management, LLC  
Tulk VV State #2 Tank Battery  
GPS: 33.073477, -103.716779  
Lea County, New Mexico

Proposed Deferred  
Remediation and Reclamation  
Plan

Figure  
3



**Attachment #4**

**Soil Boring Logs**





## Borehole Logging Form

Boring/Well ID #: SB-1		SITE NAME: Tulk VV State 2		CLIENT NAME: Foundation Energy			
Date Started: 6/24/2020		Location: Tulk VV St 2 Battery					
Date Completed: 6/24/2020		TOC Elevation: N/A		DTW: 150' - 200'			
Type of Drill: Air Rotary		Geologist: MW					
Bit Size: 6"		Project Manager: Kyle Norman					
Drilling Company: HCF Drilling							
Depth (feet)	Well Completion	Sample Type	Field CL-	PID (ppm)	Laboratory Sample	USCS	Description
Surface			2,047	1.2			(SS) SW - Brown, well graded, no odor
5			150	1.0			
10			89	0.3			(S) SW - tan, well graded, caliche, No odor
15							(S) SW - tan, well graded, caliche, no odor
20							
25							
30							
35							
40							
45							
50							
55							
60							
65							
70							
75							
80							
85							
90							
95							
100							
105							
110							
115							
120							



## Borehole Logging Form

Boring/Well ID #: SB-2		SITE NAME: Tulk VV State 2		CLIENT NAME: Foundation Energy			
Date Started: 6/24/2020		Location: Tulk VV St 2 Battery					
Date Completed: 6/24/2020		TOC Elevation: N/A		DTW: 150'-200'			
Type of Drill: Air Rotary		Geologist: KW					
Bit Size: 6"		Project Manager: Kyle Norman					
Drilling Company: HCI Drilling							
Depth (feet)	Well Completion	Sample Type	Field CL-	PID (ppm)	Laboratory Sample	USCS	Description
Surface			269	1.3			(SS) SW - Brown, well graded, no odor
5			148	0.9			(S') SW - tan, well graded, caliche, no odor
10			86	0.5			(10') SW - tan, well graded caliche, no odor
15							
20							
25							
30							
35							
40							
45							
50							
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70							
75							
80							
85							
90							
95							
100							
105							
110							
115							
120							





## Borehole Logging Form

Boring/Well ID #: <b>SB-3</b>		SITE NAME: <b>Tulk VV State 2</b>		CLIENT NAME: <b>Foundation Energy</b>			
Date Started: <b>6/24/2020</b>		Location: <b>Tulk VV St 2 Battery</b>					
Date Completed: <b>6/24/2020</b>		TOC Elevation: <b>N/A</b>		DTW: <b>150'-200'</b>			
Type of Drill: <b>Air Rotary</b>		Geologist: <b>Kn</b>					
Bit Size: <b>6"</b>		Project Manager: <b>Kyle Norman</b>					
Drilling Company: <b>HCI Drilling</b>							
Depth (feet)	Well Completion	Sample Type	Field CL-	PID (ppm)	Laboratory Sample	USCS	Description
Surface			24,306	0.5			(5) SW - Brown, well graded, no odor
5			764	3.8			(5) SW - tan, well graded, caliche, no odor
10			433	1.8			(10)
15			113	1.5			(15)
20							
25							
30							
35							
40							
45							
50							
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90							
95							
100							
105							
110							
115							
120							



## Borehole Logging Form

Boring/Well ID #: <u>SB-4</u>		SITE NAME: <u>Tulk VV State 2</u>		CLIENT NAME: <u>Foundation Energy</u>			
Date Started: <u>6/24/2020</u>		Location: <u>Tulk VV St 2 Battery</u>					
Date Completed: <u>6/24/2020</u>		TOC Elevation: <u>N/A</u>		DTW: <u>150' - 200'</u>			
Type of Drill: <u>Air Rotary</u>		Geologist: <u>KU</u>					
Bit Size: <u>6"</u>		Project Manager: <u>Kyle Norman</u>					
Drilling Company: <u>HCI Drilling</u>							
Depth (feet)	Well Completion	Sample Type	Field CL-	PID (ppm)	Laboratory Sample	USCS	Description
Surface			22,419	0.9			(SS) SW-Brown, well graded, no odor
5			1,090	0.8			(S) SW-tan, well graded, caliche, no odor
10			201	1.3			(S)
15			209	1.1			(S)
20							
25							
30							
35							
40							
45							
50							
55							
60							
65							
70							
75							
80							
85							
90							
95							
100							
105							
110							
115							
120							

**Attachment #5**

**Depth to Groundwater Data**



# 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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">L 05142 POD2</a>		L	LE	2	2	2	33	14S	32E	619925	3659493*	687	314	208	106
<a href="#">L 05142 X6</a>		L	LE	4	2	2	28	14S	32E	619904	3660903*	749	310	167	143

Average Depth to Water: **187 feet**

Minimum Depth: **167 feet**

Maximum Depth: **208 feet**

**Record Count:** 2

## Basin/County Search:

**Basin:** Lea County

## UTMNAD83 Radius Search (in meters):

**Easting (X):** 619777.78

**Northing (Y):** 3660164.7

**Radius:** 805

\*UTM location was derived from PLSS - see Help

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

9/23/20 6:33 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



# New Mexico Office of the State Engineer

## Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
L 05142	POD2	2	2	2	33	14S	32E	619925	3659493*

x

**Driller License:** 111 **Driller Company:** BURKE, EDWARD B.

**Driller Name:**

<b>Drill Start Date:</b> 08/19/1964	<b>Drill Finish Date:</b> 08/26/1964	<b>Plug Date:</b>
<b>Log File Date:</b> 09/04/1964	<b>PCW Rcv Date:</b> 09/22/1964	<b>Source:</b> Shallow
<b>Pump Type:</b> SUBMER	<b>Pipe Discharge Size:</b>	<b>Estimated Yield:</b>
<b>Casing Size:</b> 10.75	<b>Depth Well:</b> 314 feet	<b>Depth Water:</b> 208 feet

x

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	210	246	Shallow Alluvium/Basin Fill
	261	307	Shallow Alluvium/Basin Fill

x

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	219	313

x

\*UTM location was derived from PLSS - see Help

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9/23/20 6:34 AM

POINT OF DIVERSION SUMMARY



# New Mexico Office of the State Engineer

## Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
L 05142 X6		4	2	2	28	14S	32E	619904	3660903*

x

**Driller License:** 111 **Driller Company:** BURKE, EDWARD B.

**Driller Name:**

<b>Drill Start Date:</b> 10/26/1963	<b>Drill Finish Date:</b> 11/02/1963	<b>Plug Date:</b>
<b>Log File Date:</b> 11/08/1963	<b>PCW Rcv Date:</b> 04/09/1964	<b>Source:</b> Shallow
<b>Pump Type:</b> SUBMER	<b>Pipe Discharge Size:</b>	<b>Estimated Yield:</b>
<b>Casing Size:</b> 10.38	<b>Depth Well:</b> 310 feet	<b>Depth Water:</b> 167 feet

x

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	170	238	Shallow Alluvium/Basin Fill
	243	302	Shallow Alluvium/Basin Fill

x

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	206	305

x

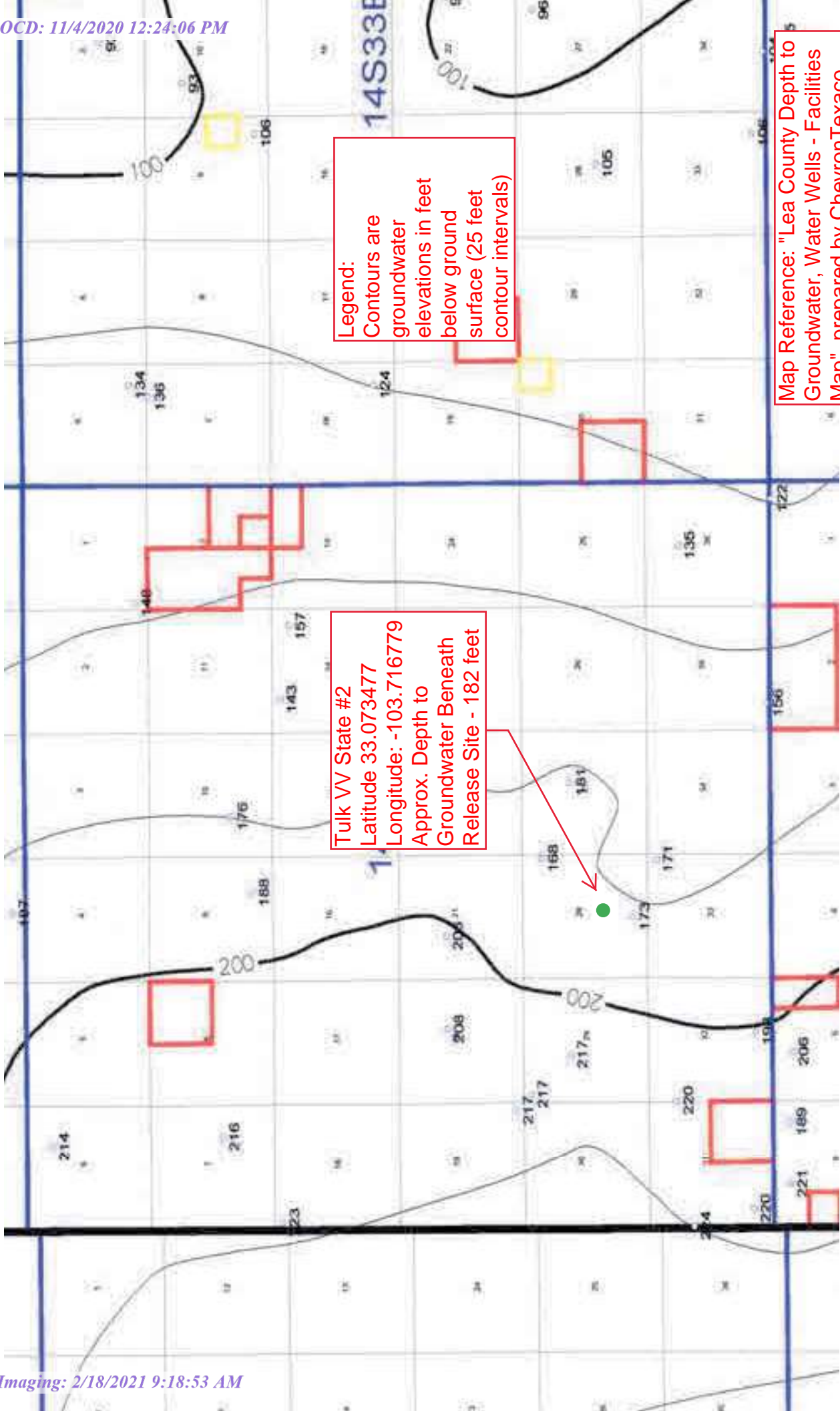
\*UTM location was derived from PLSS - see Help

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9/23/20 6:35 AM

POINT OF DIVERSION SUMMARY





**Attachment #6**

**Table 3 – Summary of Soil Laboratory Analytical Results**

Table 2 - Concentrations of BTEX, TPH and Chlorides in Soil													
Sample ID	Date	Depth	Soil Status	SW 846 8260C					SW 846 8015M Ext.				SM4500CL-B
				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO C <sub>6</sub> -C <sub>10</sub> (mg/kg)	DRO C <sub>10</sub> -C <sub>28</sub> (mg/kg)	MRO C <sub>28</sub> -C <sub>35</sub> (mg/kg)	TPH C <sub>6</sub> -C <sub>35</sub> (mg/kg)	Chloride (mg/kg)
SB-1 @Surface	6/24/2020	Surface	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1,800
SB-1 @10'	6/24/2020	10'	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	64
SB-2 @Surface	6/24/2020	Surface	In-Situ	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	272
SB-2 @10'	6/24/2020	10'	In-Situ	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	112
SB-3 @Surface	6/24/2020	Surface	In-Situ	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<b>43,200</b>
SB-3 @5'	6/24/2020	5'	In-Situ	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	768
SB-3 @15'	6/24/2020	15'	In-Situ	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	112
SB-4 @Surface	6/24/2020	Surface	In-Situ	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<b>28,800</b>
SB-4 @5'	6/24/2020	5'	In-Situ	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	1,300
SB-4 @15'	6/24/2020	15'	In-Situ	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	304
NMOCD Closure Criteria (a)				<b>10</b>	-	-	-	<b>50</b>	-	-	-	<b>2,500</b>	<b>20,000 (b)</b>

## Notes:

- (a) New Mexico Oil Conservation Division (NMOCD) - New Mexico Administrative Code (NMAC) Closure Criteria defined based on Table 1 of 19.15.29.12 constituents to delineate a release (> 10,000 mg/l total dissolved solids) both horizontally and vertically at sites that have minimum depth to groundwater > 100 feet bgs.
- (b) NMOCD - NMAC 19.15.29.13 requires that reclamation areas at sites no longer in use (remediated and/or being closed), have a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg. This criteria would apply to this site as part of reclamation.

**Bold** - Indicates constituent concentration above respective NMOCD - NMAC Closure Criteria.

**Attachment #6**  
**Laboratory Analytical Reports**



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

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June 26, 2020

KYLE NORMAN

FOUNDATION ENERGY

15 E. 5TH STREET, SUITE 1200

TULSA, OK 74103

RE: TULK VV STATE 2 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/24/20 13:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received: 06/24/2020  
 Reported: 06/26/2020  
 Project Name: TULK VV STATE 2 BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 06/24/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SB - 1 @ SURFACE (H001658-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.68	
Toluene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.85	
Ethylbenzene*	<0.050	0.050	06/25/2020	ND	2.13	106	2.00	10.0	
Total Xylenes*	<0.150	0.150	06/25/2020	ND	6.22	104	6.00	10.2	
Total BTEX	<0.300	0.300	06/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1800	16.0	06/25/2020	ND	432	108	400	0.00	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	210	105	200	1.56	
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	222	111	200	0.786	
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND					

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 130 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received:	06/24/2020	Sampling Date:	06/24/2020
Reported:	06/26/2020	Sampling Type:	Soil
Project Name:	TULK VV STATE 2 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: SB - 1 @ 10' (H001658-03)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.68	
Toluene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.85	
Ethylbenzene*	<0.050	0.050	06/25/2020	ND	2.13	106	2.00	10.0	
Total Xylenes*	<0.150	0.150	06/25/2020	ND	6.22	104	6.00	10.2	
Total BTX	<0.300	0.300	06/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	06/25/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	210	105	200	1.56	
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	222	111	200	0.786	
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND					

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 125 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received: 06/24/2020  
 Reported: 06/26/2020  
 Project Name: TULK VV STATE 2 BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 06/24/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SB - 2 @ SURFACE (H001658-04)**

BTEx 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.68		
Toluene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.85		
Ethylbenzene*	<0.050	0.050	06/25/2020	ND	2.13	106	2.00	10.0		
Total Xylenes*	<0.150	0.150	06/25/2020	ND	6.22	104	6.00	10.2		
Total BTEx	<0.300	0.300	06/25/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	06/25/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	210	105	200	1.56	
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	222	111	200	0.786	
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND					

Surrogate: 1-Chlorooctane 120 % 44.3-144

Surrogate: 1-Chlorooctadecane 131 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received: 06/24/2020  
 Reported: 06/26/2020  
 Project Name: TULK VV STATE 2 BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 06/24/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SB - 2 @ 10' (H001658-06)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.68	
Toluene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.85	
Ethylbenzene*	<0.050	0.050	06/25/2020	ND	2.13	106	2.00	10.0	
Total Xylenes*	<0.150	0.150	06/25/2020	ND	6.22	104	6.00	10.2	
Total BTX	<0.300	0.300	06/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/25/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	210	105	200	1.56	
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	222	111	200	0.786	
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND					

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 121 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received: 06/24/2020  
 Reported: 06/26/2020  
 Project Name: TULK VV STATE 2 BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 06/24/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SB - 3 @ SURFACE (H001658-07)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.68	
Toluene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.85	
Ethylbenzene*	<0.050	0.050	06/25/2020	ND	2.13	106	2.00	10.0	
Total Xylenes*	<0.150	0.150	06/25/2020	ND	6.22	104	6.00	10.2	
Total BTEx	<0.300	0.300	06/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	43200	16.0	06/25/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	210	105	200	1.56	
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	222	111	200	0.786	
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND					

Surrogate: 1-Chlorooctane 115 % 44.3-144

Surrogate: 1-Chlorooctadecane 123 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received: 06/24/2020  
 Reported: 06/26/2020  
 Project Name: TULK VV STATE 2 BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 06/24/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SB - 3 @ 5' (H001658-08)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/26/2020	ND	1.94	96.8	2.00	4.70	
Toluene*	<0.050	0.050	06/26/2020	ND	1.93	96.6	2.00	4.94	
Ethylbenzene*	<0.050	0.050	06/26/2020	ND	1.97	98.5	2.00	4.31	
Total Xylenes*	<0.150	0.150	06/26/2020	ND	5.77	96.2	6.00	4.29	
Total BTEx	<0.300	0.300	06/26/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	768	16.0	06/26/2020	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	202	101	200	11.4	
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	199	99.7	200	12.7	
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND					

Surrogate: 1-Chlorooctane 112 % 44.3-144

Surrogate: 1-Chlorooctadecane 122 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received:	06/24/2020	Sampling Date:	06/24/2020
Reported:	06/26/2020	Sampling Type:	Soil
Project Name:	TULK VV STATE 2 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: SB - 3 @ 15' (H001658-10)**

BTX 8021B			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.68		
Toluene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.85		
Ethylbenzene*	<0.050	0.050	06/25/2020	ND	2.13	106	2.00	10.0		
Total Xylenes*	<0.150	0.150	06/25/2020	ND	6.22	104	6.00	10.2		
Total BTX	<0.300	0.300	06/25/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 73.3-129

Chloride, SM4500CI-B			mg/kg							
			Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	06/25/2020	ND	432	108	400	0.00		

TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	210	105	200	1.56		
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	222	111	200	0.786		
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND						

Surrogate: 1-Chlorooctane 110 % 44.3-144

Surrogate: 1-Chlorooctadecane 120 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received: 06/24/2020  
 Reported: 06/26/2020  
 Project Name: TULK VV STATE 2 BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 06/24/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SB - 4 @ SURFACE (H001658-11)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.68	
Toluene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.85	
Ethylbenzene*	<0.050	0.050	06/25/2020	ND	2.13	106	2.00	10.0	
Total Xylenes*	<0.150	0.150	06/25/2020	ND	6.22	104	6.00	10.2	
Total BTX	<0.300	0.300	06/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	28800	16.0	06/25/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	210	105	200	1.56	
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	222	111	200	0.786	
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND					

Surrogate: 1-Chlorooctane 110 % 44.3-144

Surrogate: 1-Chlorooctadecane 124 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received: 06/24/2020  
 Reported: 06/26/2020  
 Project Name: TULK VV STATE 2 BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 06/24/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SB - 4 @ 5' (H001658-12)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/26/2020	ND	1.94	96.8	2.00	4.70		
Toluene*	<0.050	0.050	06/26/2020	ND	1.93	96.6	2.00	4.94		
Ethylbenzene*	<0.050	0.050	06/26/2020	ND	1.97	98.5	2.00	4.31		
Total Xylenes*	<0.150	0.150	06/26/2020	ND	5.77	96.2	6.00	4.29		
Total BTEx	<0.300	0.300	06/26/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.4 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1300	16.0	06/26/2020	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	202	101	200	11.4	
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	199	99.7	200	12.7	
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND					

Surrogate: 1-Chlorooctane 112 % 44.3-144

Surrogate: 1-Chlorooctadecane 122 % 42.2-156

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**Analytical Results For:**

FOUNDATION ENERGY  
 KYLE NORMAN  
 15 E. 5TH STREET, SUITE 1200  
 TULSA OK, 74103  
 Fax To:

Received:	06/24/2020	Sampling Date:	06/24/2020
Reported:	06/26/2020	Sampling Type:	Soil
Project Name:	TULK VV STATE 2 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: SB - 4 @ 15' (H001658-14)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.68	
Toluene*	<0.050	0.050	06/25/2020	ND	2.10	105	2.00	9.85	
Ethylbenzene*	<0.050	0.050	06/25/2020	ND	2.13	106	2.00	10.0	
Total Xylenes*	<0.150	0.150	06/25/2020	ND	6.22	104	6.00	10.2	
Total BTX	<0.300	0.300	06/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	06/25/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2020	ND	210	105	200	1.56	
DRO >C10-C28*	<10.0	10.0	06/25/2020	ND	222	111	200	0.786	
EXT DRO >C28-C36	<10.0	10.0	06/25/2020	ND					

Surrogate: 1-Chlorooctane 113 % 44.3-144

Surrogate: 1-Chlorooctadecane 124 % 42.2-156

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### Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



41 of 31 epg

1 of 2



## ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
 (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Foundation Energy Management										P.O. #: Tulk VV State 2 Battery									
Project Manager: Kyle Norman										Company: Tasman									
Address: 1801 Broadway Suite 1500										Attn: Kyle Norman									
City: Denver										Address: 6855 W. 119th Ave.									
State: CO Zip: 80202										City: Broomfield									
Phone #: Fax #:										State: CO Zip: 80020									
Project #: Project Owner:										Phone #: 303-487-1228									
Project Name: Tulk VV State 2 Battery										Fax #:									
Project Location:										DATE									
Sampler Name: Kyle Norman										TIME									
FOR LAB USE ONLY										ANALYSIS REQUEST									
Lab I.D.										Sample I.D.									
1 SB-1 @ Surface										(G)RAB OR (C)OMP.									
2 SB-1 @ 5 ft										# CONTAINERS									
3 SB-1 @ 10 ft										GROUNDWATER									
4 SB-2 @ Surface										WASTEWATER									
5 SB-2 @ 5 ft										SOIL									
6 SB-2 @ 10 ft										OIL									
7 SB-3 @ Surface										SLUDGE									
8 SB-3 @ 5 ft										OTHER :									
9 SB-3 @ 10 ft										ACID/BASE:									
10 SB-3 @ 15 ft										ICE / COOL									
										OTHER :									
										DATE									
										TIME									
										Chlorides									
										TPH 8015 M EXT									
										BTEX									
										Texas TPH									
										Complete Cations/Anions									
										TDS									
										Total RCRA 8 Metals									
										HOLD									

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Relinquished By: *[Signature]* Date: *6/24/20* Received By: *[Signature]* Date: *6/24/20*

Relinquished By: *[Signature]* Date: *6-24-20* Received By: *[Signature]* Date: *6-24-20*

Delivered By: (Circle One) *Cardinal* Time: *1:50*

Sampler - UPS - Bus - Other: *2.4c #113*

Sample Condition: ☒ Cool ☐ Intact ☐ Yes ☐ No

CHECKED BY: *[Signature]* (Initials) *T.E.*

Phone Result: ☐ Yes ☒ No Add'l Phone #: *6/25/20*

Fax Result: ☐ Yes ☒ No Add'l Fax #:

REMARKS: email results: knorman@tasman-geo.com  
jsmith@foundationenergy.com

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



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**CARDINAL LABORATORIES**

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2 of 2

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: Foundation Energy Management

**BILL TO****ANALYSIS REQUEST**

Project Manager: Kyle Norman

P.O. #: Tulk VV State 2 Battery

Address: 1801 Broadway Suite 1500

Company: Tasman

City: Denver

State: CO Zip: 80202

Attn: Kyle Norman

Phone #:

Fax #:

Address: 6855 W. 119th Ave.

Project #:

Project Owner:

City: Broomfield

Project Name: Tulk VV State 2 Battery

State: CO Zip: 80020

Project Location:

Phone #: 303-487-1228

Sample Name:

Kyle Norman

Fax #:

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

(G)RAB OR (C)OMP.  
# CONTAINERS

MATRIX		PRESERV	SAMPLING
GROUNDWATER	WASTEWATER		
SOIL	OIL		
SLUDGE	OTHER:		
ACID/BASE:	ICE / COOL		
OTHER:			

DATE TIME

Chlorides

TPH 8015 M EXT

BTEX

Texas TPH

Complete Cations/Anions

TDS

Total RCRA 8 Metals

HOLD

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Relinquished By:

Date: 6/24/20

Received By:

Date: 6/24/20

Relinquished By:

Date: 6-24-20

Received By:

Date: 6-24-20

Relinquished By:

Date: 6-24-20

Received By:

Date: 6-24-20

Delivered By: (Circle One)

Date: 6-24-20

Received By:

Date: 6-24-20

Sampler - UPS - Bus - Other:

Date: 8-4-20

Received By:

Date: 8-4-20

Sample Condition  
☐ Cool ☐ Intact  
☐ Yes ☐ No

CHECKED BY:  
 (Initials)

Phone Result: ☐ Yes ☒ No Add'l Phone #:  
 Fax Result: ☐ Yes ☒ No Add'l Fax #:

email results: knorman@tasman-geo.com  
 jsmith@foundationenergy.com

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

**Attachment #7**

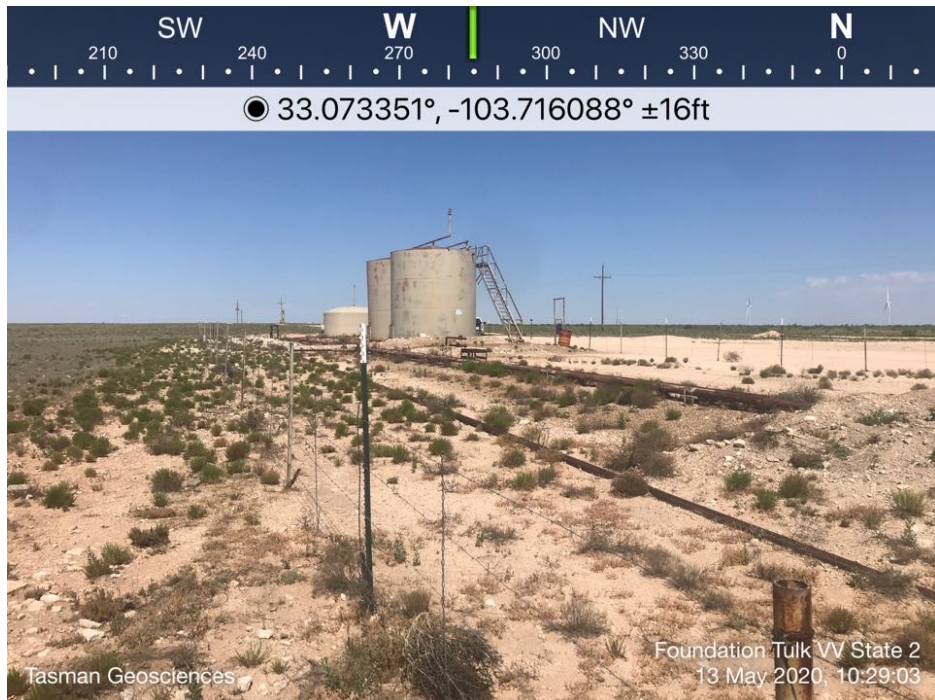
**General Site Photographs**

Foundation  
Tulk VV State 2  
05/13/2020

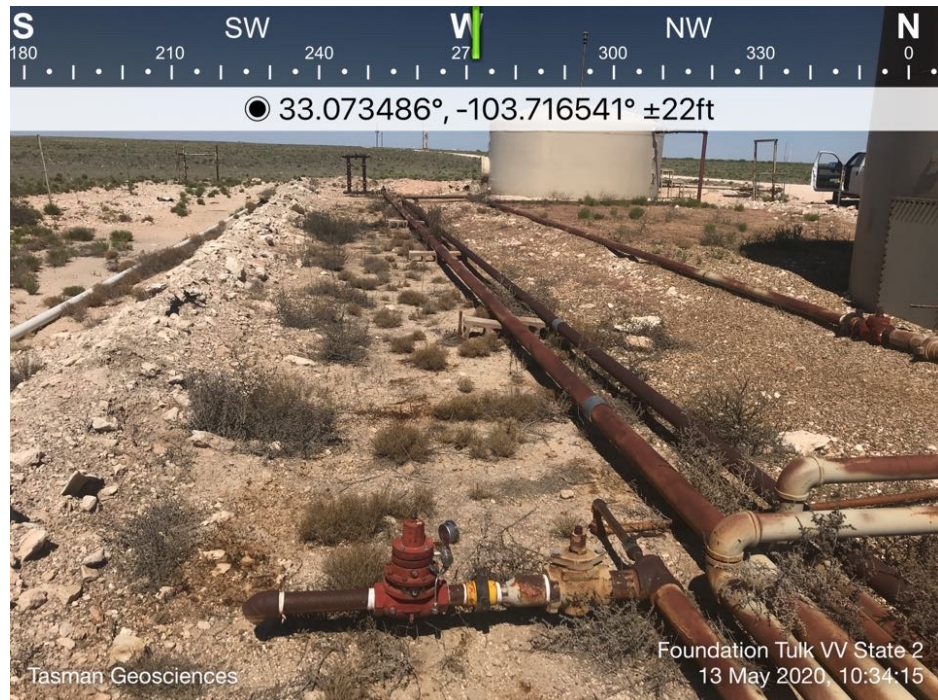
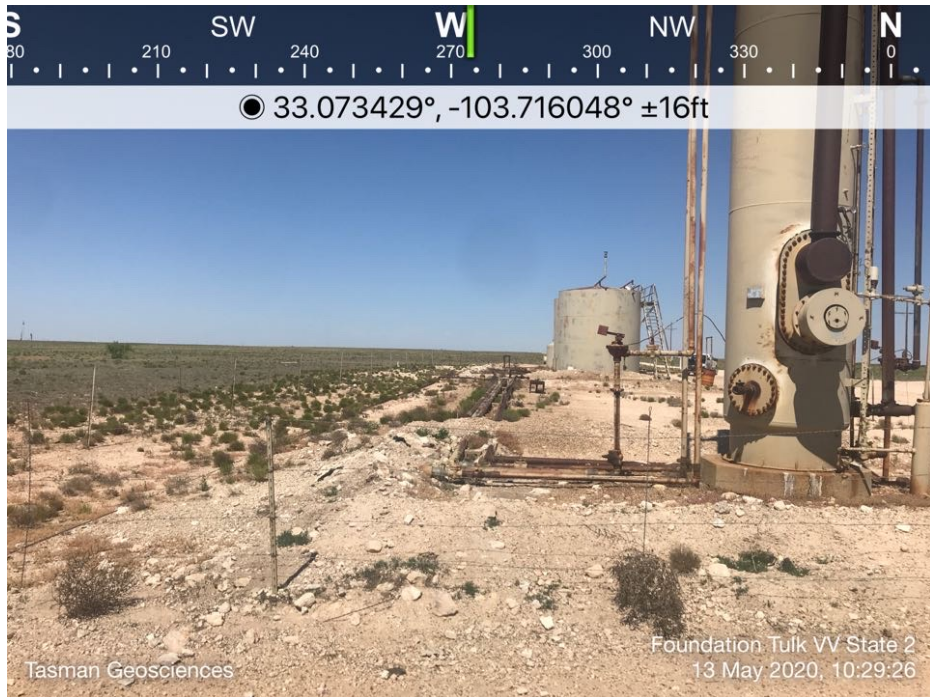




Foundation  
Tulk VV State 2  
05/13/2020

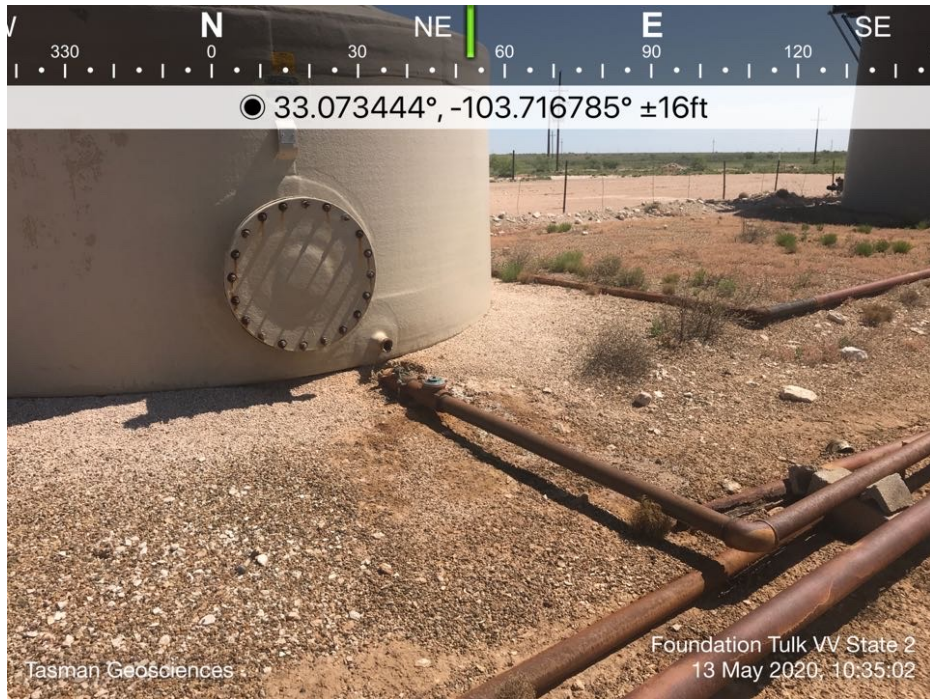


Foundation  
Tulk VV State 2  
05/13/2020



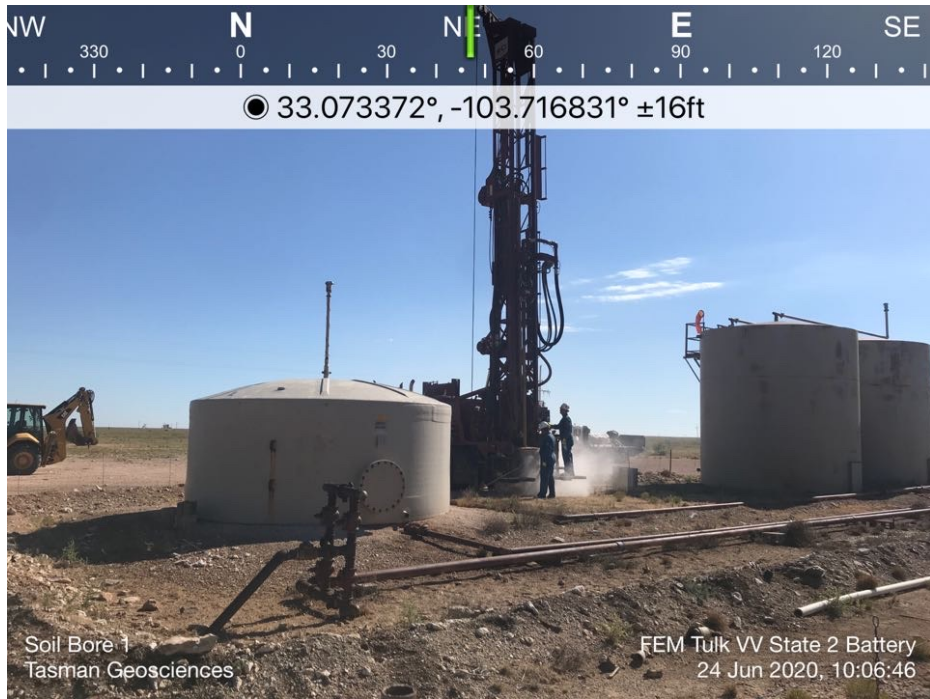


Foundation  
Tulk VV State 2  
05/13/2020





Foundation  
Tulk VV State 2  
6/24/2020



Foundation  
Tulk VV State 2  
6/24/2020



**Attachment #9**

**Release Notification and Corrective action (Form C-141)**

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	NRM2012853960
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	Foundation Energy Management, LLC	OGRID	370740
Contact Name	James Smith	Contact Telephone	918-526-5592
Contact email	jsmith@foundationenergy.com	Incident # (assigned by OCD)	
Contact mailing address	15 E 5th St Suite 1200 Tulsa, OK 74103		

### Location of Release Source

Latitude 33.073477 Longitude -103.716779  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Tulk VV State #002	Site Type	Tank Battery
Date Release Discovered	4/24/2020	API# (if applicable)	30-025-28437

Unit Letter	Section	Township	Range	County
I	28	14S	32E	Lea

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

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 178	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

Internal corrosion caused the recirculation line nipple on the back of the fiberglass water tank to fail. Recirculation line valve completely separated from the nipple resulting in loss of total tank fluids within the containment berm.



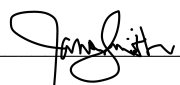
State of New Mexico  
Oil Conservation Division

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<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p> <p>Volume greater than 25 bbls</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p> <p>Yes. Via phone call from James Smith (Foundation Energy) to Mike Bratcher at 12:30 pm on 4/24/2020. Then subsequent email to Mike Bratcher and Jim Griswold at 12:45 on 4/24/2020.</p>	

## Initial Response

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

<p><input checked="" type="checkbox"/> The source of the release has been stopped.</p> <p><input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.</p> <p><input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.</p> <p><input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.</p>	
<p>If all the actions described above have <u>not</u> been undertaken, explain why:</p> <p>Removal of the contaminated soil has not taken place. The contamination is confined within the berm. Removal of the tank battery and associated infrastructure would be required to remove the soil. Delineation work will begin. Deferral of remediation is being requested due to the need of dismantling the tank battery and its infrastructure.</p>	
<p>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.</p>	
<p>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.</p>	
<p>Printed Name: <u>James Smith</u></p> <p>Signature: <u></u></p> <p>email: <u>jsmith@foundationenergy.com</u></p>	<p>Title: <u>HSE-Regulatory Supervisor</u></p> <p>Date: <u>5/7/2020</u></p> <p>Telephone: <u>918-526-5592</u></p>
<p><b><u>OCD Only</u></b></p> <p>Received by: <u>Ramona Marcus</u> Date: <u>5/11/2020</u></p>	

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**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?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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


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

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Printed Name: James Smith Title: HSE-Regulatory Supervisor

Signature:  Date: 5/7/2020

email: jsmith@foundationenergy.com Telephone: 918-526-5592

**OCD Only**

Received by: Chad Hensley Date: 02/18/2021



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## 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: James Smith

Title: HSE-Regulatory Supervisor

Signature: 

Date: 5/7/2020

email: jsmith@foundationenergy.com

Telephone: 918-526-5592

**OCD Only**

Received by: Chad Hensley

Date: 02/18/2021

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

Signature: Deferral DENIED

Date: 02/18/2021

State of New Mexico  
Oil Conservation Division

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Facility ID	
Application ID	

## Closure

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

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

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

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

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

**OCD Only**

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

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

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

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

**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

Action 11076

**CONDITIONS OF APPROVAL**

Operator:	FOUNDATION ENERGY MANAGEMENT, 5057 KELLER SPRINGS RD	OGRID:	370740	Action Number:	11076	Action Type:	C-141
Suite 650	ADDISON, TX75001						
OCD Reviewer:	Condition						
chensley	Before we can approve a deferral, the spill must be fully delineated. OCD will not defer the entire battery as a whole. Please remove as much of the contaminated soil with shovels and a hydrovac. If you believe a certain area will require a deferral, please make sure that it has been fully delineated and include a picture of the area to validate the request.						