

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

Form C-141  
Revised April 3, 2017

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

### Release Notification and Corrective Action

#### OPERATOR

Initial Report  Final Report

Name of Company	Benson-Montin-Greer Drilling Corp.	Contact	Zach Stradling
Address	4900 College Blvd., Farmington, NM 87402	Telephone No.	505-325-8874
Facility Name	Homestead Ranch #2	Facility Type	Producing Well
Surface Owner	Various Private	Mineral Owner	Various Private
		API No.	30-039-23586

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	34	25N	02W	990'	South	1850'	West	Rio Arriba, NM

Latitude N36.349903 Longitude W107.040127 NAD83

#### NATURE OF RELEASE

Type of Release	Produced Water	Volume of Release	20 bbls	Volume Recovered	0 bbls
Source of Release	Produced Water Tank	Date and Hour of Occurrence	4/18/17	Date and Hour of Discovery	4/18/17 5p
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Vanessa Fields		
By Whom?	Zach Stradling	Date and Hour	4/19/17 3p		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	N/A		

If a Watercourse was Impacted, Describe Fully.\*

N/A

Describe Cause of Problem and Remedial Action Taken.\*

Leak at 3" x 2" reducer in production water line between separator and produced water tank (near produced water tank) due to corrosion. Pumping unit and well were immediately shut in.

Describe Area Affected and Cleanup Action Taken.\*

Affected soils inside produced water tank secondary containment berm. AES collected soil samples with NMOCD witness (Vanessa Fields) and excavation was started but put on hold due to weather and muddy roads/location. Plan to resume excavation on 5/2/17. Contaminated soils to be transported and disposed of at Envirotech Landfarm. Note that further mitigation details for the previous release (2008) will be finalized once excavation of current release is complete. Previous release was to soils only - vapor wells extend to 50 feet bgs - no groundwater present.

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

Signature:		<b>OIL CONSERVATION DIVISION</b>	
Printed Name:	Zach Stradling	Approved by Environmental Specialist:	
Title:	Vice President	Approval Date:	5/17/2017
E-mail Address:	zstradling@bmgdrilling.com	Expiration Date:	
Date:	5/1/17	Conditions of Approval:	N/A
Phone:	505-325-8874	Attached	<input checked="" type="checkbox"/>

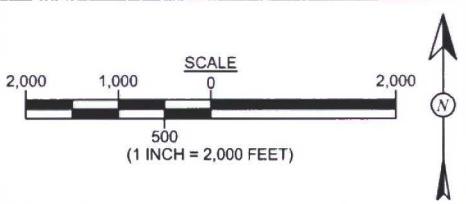
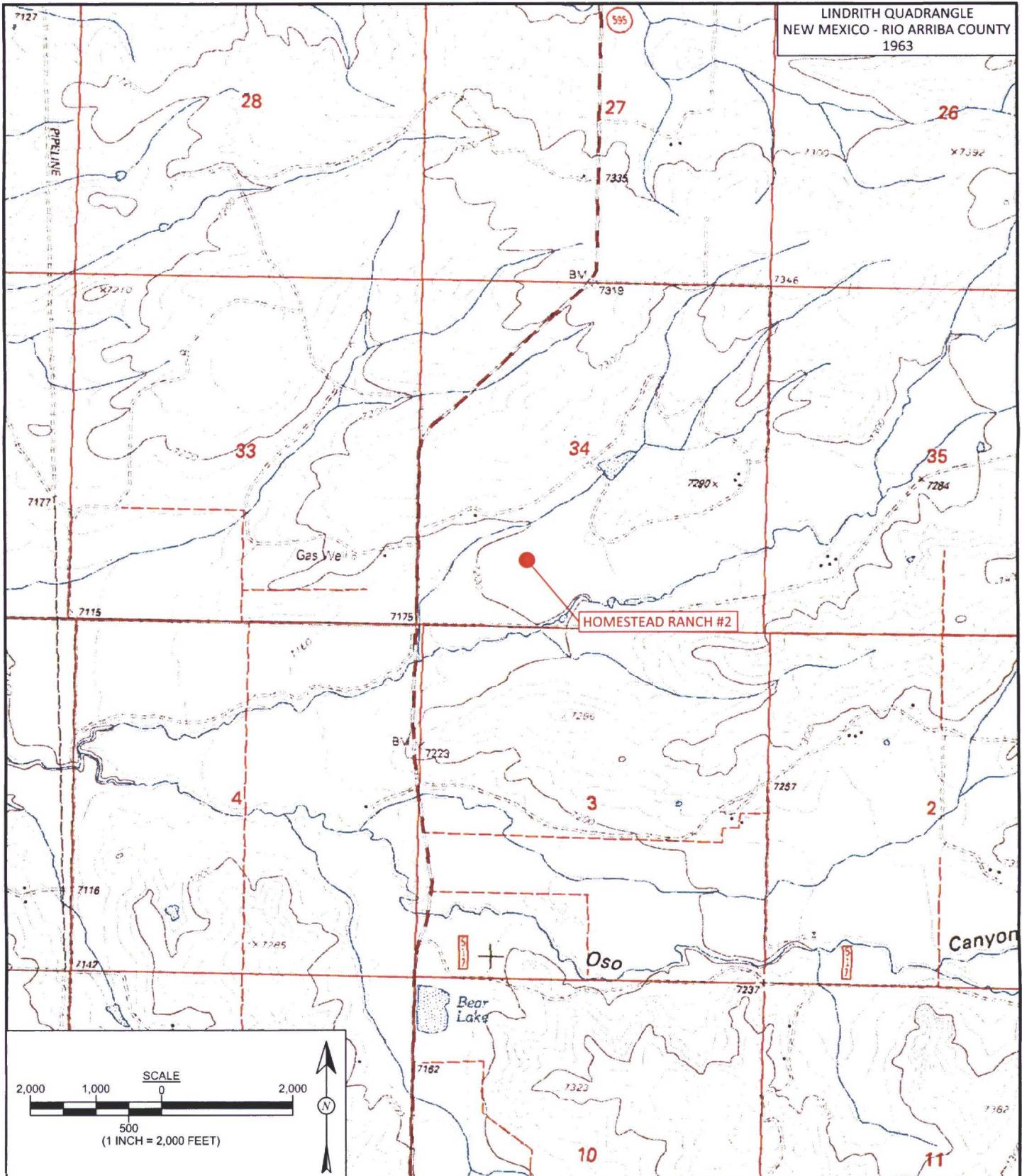
\* Attach Additional Sheets If Necessary

OIL CONS. DIV DIST. 3

MAY 04 2017

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LINDRITH QUADRANGLE  
NEW MEXICO - RIO ARRIBA COUNTY  
1963

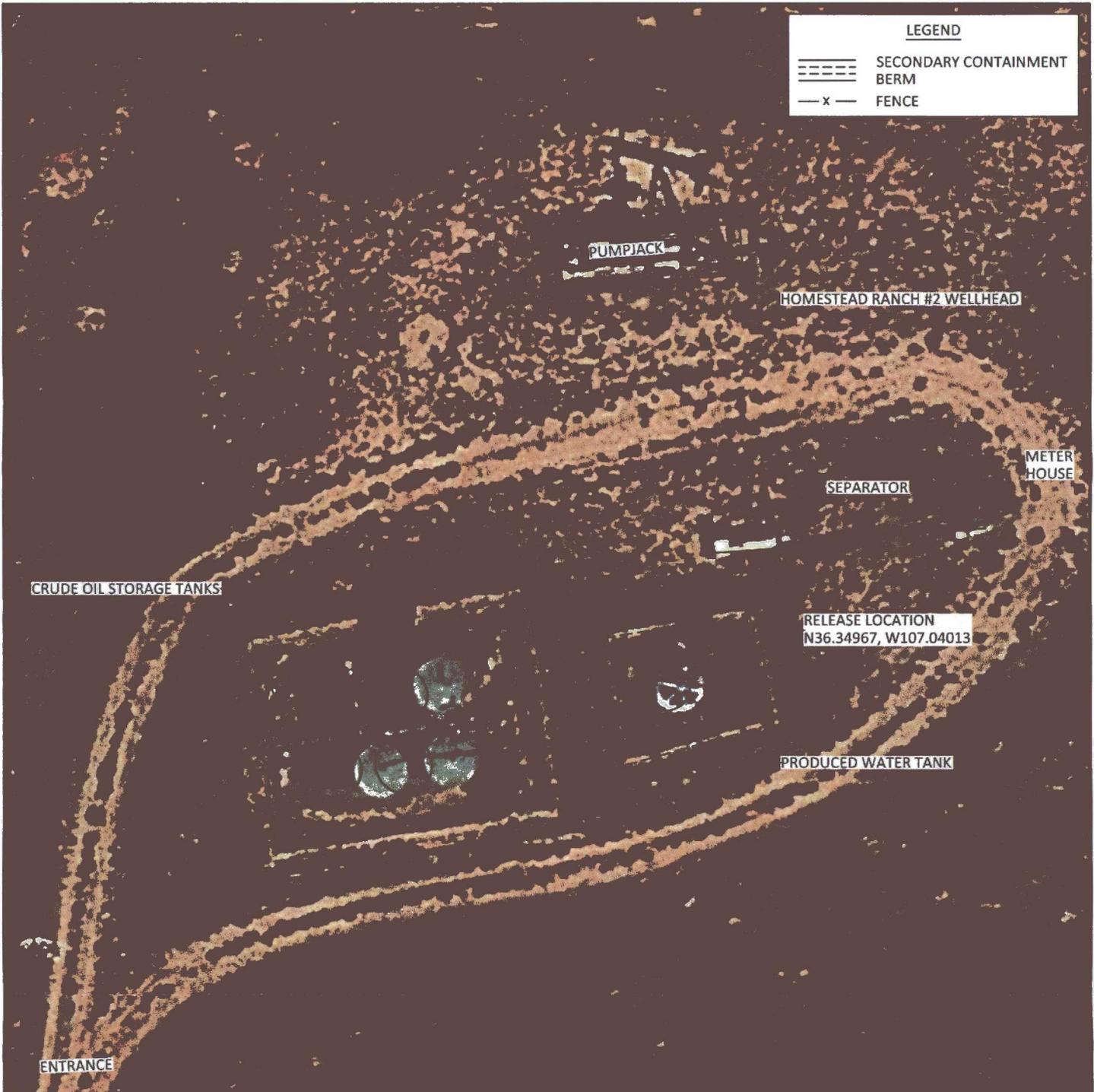



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<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> April 26, 2017
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> April 26, 2017
<b>CHECKED BY:</b> E. McNally	<b>DATE CHECKED:</b> April 26, 2017
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> April 26, 2017

**FIGURE 1**

**TOPOGRAPHIC SITE LOCATION MAP**  
BENSON-MONTIN-GREER  
HOMESTEAD RANCH #2  
SE ¼ SW ¼, SECTION 34, T25N, R2W  
RIO ARRIBA COUNTY, NEW MEXICO  
N36.34990, W107.04006



LEGEND	
	SECONDARY CONTAINMENT
	BERM
	FENCE

CRUDE OIL STORAGE TANKS

PUMPJACK

HOMESTEAD RANCH #2 WELLHEAD

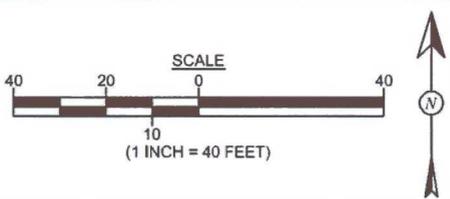
SEPARATOR

METER HOUSE

RELEASE LOCATION  
N36.34967, W107.04013

PRODUCED WATER TANK

ENTRANCE



AERIAL SOURCE: © 2017 GOOGLE EARTH PRO, AERIAL DATE: OCTOBER 5, 2016.



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<b>CHECKED BY:</b> E. McNally	<b>DATE CHECKED:</b> April 26, 2017
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> April 26, 2017

**FIGURE 2**

**AERIAL SITE MAP  
APRIL 2017**

BENSON-MONTIN-GREER  
HOMESTEAD RANCH #2  
SE ¼ SW ¼, SECTION 34, T25N, R2W  
RIO ARRIBA COUNTY, NEW MEXICO  
N36.34990, W107.04006

**FIGURE 3**

**INITIAL RELEASE ASSESSMENT  
SAMPLE LOCATIONS AND RESULTS  
APRIL 2017**  
BENSON-MONTIN-GREER  
HOMESTEAD RANCH #2  
SE ¼ SW ¼, SECTION 34, T25N, R2W  
RIO ARRIBA COUNTY, NEW MEXICO  
N36.34990, W107.04006



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**DRAWN BY:**  
S. Glasses

**DATE DRAWN:**  
April 26, 2017

**REVISIONS BY:**  
S. Glasses

**DATE REVISED:**  
May 1, 2017

**CHECKED BY:**  
E. McNally

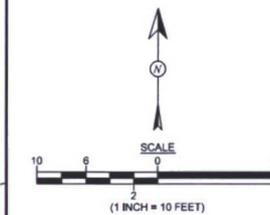
**DATE CHECKED:**  
May 1, 2017

**APPROVED BY:**  
E. McNally

**DATE APPROVED:**  
May 1, 2017

**LEGEND**

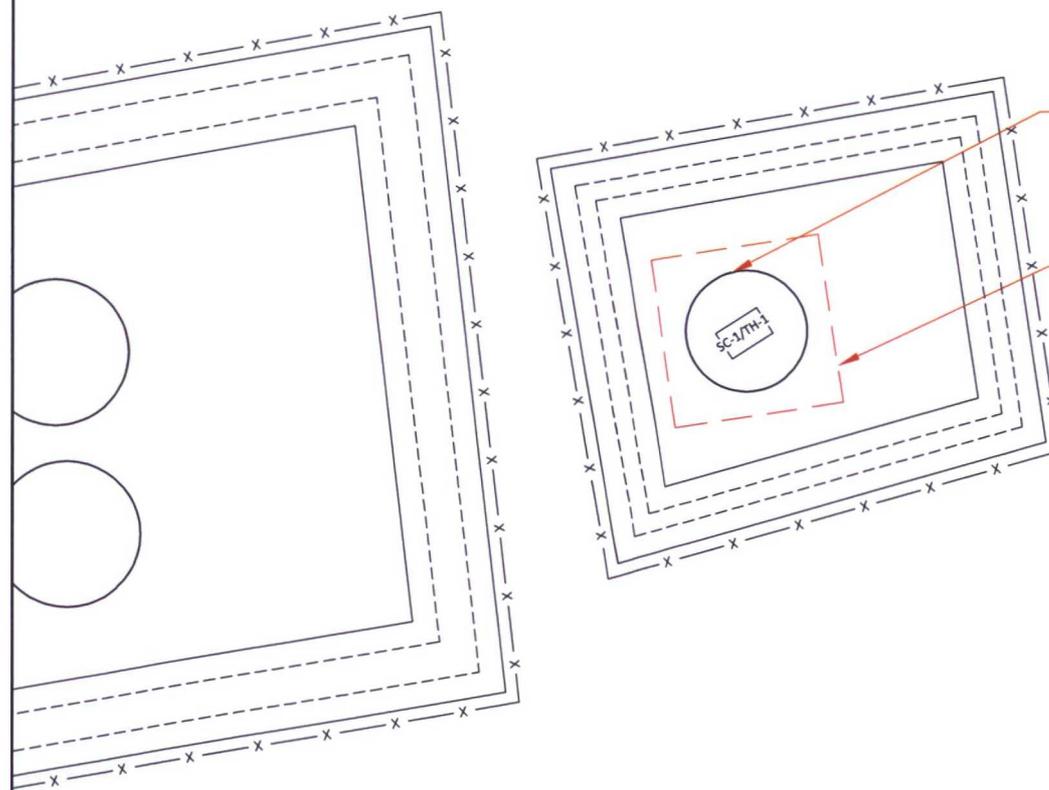
--- SECONDARY CONTAINMENT BERM  
— x — FENCE



Field Sampling Results					
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	Chlorides
<b>NMOC ACTION LEVEL</b>			—	<b>100</b>	<b>250</b>
SC-1	4/25/17	0.5	2,694	2,314	40
TH-1	4/25/17	2.5	2,192	359	20
		5	1,466	1,529	20

SC-1 IS A 5 POINT COMPOSITE SAMPLE OF PRODUCED WATER TANK.

SEPARATOR



FORMER PRODUCED WATER TANK  
RELEASE LOCATION  
N36.34967, W107.04013

RECOMMENDED EXCAVATION AREA  
14 FT x 14 FT x 8 FT DEEP

**NOTES AND RECOMMENDATIONS**

1. NMOC RISK RANK IS "10". ACTION LEVELS ARE: 1,000 mg/kg TPH, 10 mg/kg BENZENE, 50 mg/kg TOTAL BTEX, AND 600 mg/kg CHLORIDE.
2. INITIAL RECOMMENDED EXCAVATED AREA WOULD BE APPROXIMATELY 14 FEET W X 14 FEET L X 8 FEET DEEP.
3. REMOVE ALL VISIBLY STAINED SOILS.
4. USE OVM-PID ACTION LEVEL OF 100 ppm AND ON SITE FIELD SCREENING TO DETERMINE FINAL EXCAVATION EXTENTS.
5. FOLLOWING COMPLETION OF EXCAVATION, COLLECT ADDITIONAL SAMPLES FOR CONFIRMATION.

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **5/04/2017** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number **nVF1711537866** has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District III office in 30 days\_ on or before 6/04/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

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

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

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

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

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

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

**Jim Griswold**

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