<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, 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**

Revised August 8, 2011

Form C-141

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

**Release Notification and Corrective Action** 

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

						<b>OPERA</b>	ГOR		Initi	al Report		Final Repor
Name of Company Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company						Contact						
						Telephone No. (505) 326 9700						
Facility Name: San Juan 28-7 220M						Facility Typ	e: Gas well					
Surface Owner <b>BLM</b> Mineral Owner <b>F</b>						ED			API No	.30039253	98	
				LOCA	TIOI	OF RE	LEASE					
Unit Letter F	Section 22	Township 28	Range 7	Feet from the 1490		rth/South Line Feet from the Eas North 1800			West Line County West Rio Arriba			
				Latitude 36.	64989	Longitud	e <u>-170.56391</u>					
				NAT	URE	OF REL	EASE					
Type of Rele		rocarbon				Volume of Release Unknown Volume Recovered None						
Source of Re	elease BG'	Т				Date and H	Iour of Occurrence	ce	Date and	Hour of Dis	covery	/
Was Immedi	Was Immediate Notice Given?  ☐ Yes ☐ No ☒ Not Required					If YES, To Whom?						
By Whom?						Date and Hour						
Was a Water	course Read					If YES, Volume Impacting the Watercourse.						
		Ш	Yes 🔲 1	No								
If a Waterco	urse was Im	pacted, Descr	ibe Fully.'	k		OIL CONS. DIV DIST. 3						
										JAN 17	2011	
		em and Reme was encounte		n Taken.* pil sample was take	en on							
		and Cleanup A area on 12-7-		ken.* es a 12'x18' x 5' a	rea tha	will be exca	vated to at or belo	ow actio	on levels.	æ		
regulations a public health should their or the enviro	all operators n or the environment operations honment. In a	are required to ronment. The lave failed to	to report are acceptant adequately OCD accept	is true and completed of a C-141 report investigate and relations of a C-141 report investigate and relations of a C-141 relations.	lease notes that the desired t	otifications as NMOCD m contaminati	nd perform correct arked as "Final R on that pose a thr	ctive act deport" of reat to g	tions for rel does not rel round water	eases which ieve the ope r, surface wa	may e rator o iter, hu	ndanger f liability ıman health
Signature: RSpeaumen					OIL CONSERVATION DIVISION							
Printed Nam	e: Robert S	pearman				Approved by Environmental Specialist						
Title: Field	Environme	ntal Speciali	st			Approval Date: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \						
E-mail Addr	ess: robert.	.e.spearman	@cop.con	1		Conditions of Approval:						
	Date: 1-10-16 Phone: 505-324-6131					NVE1702340326						
Attach Add	itional Shee	ets If Necess	sary					-				

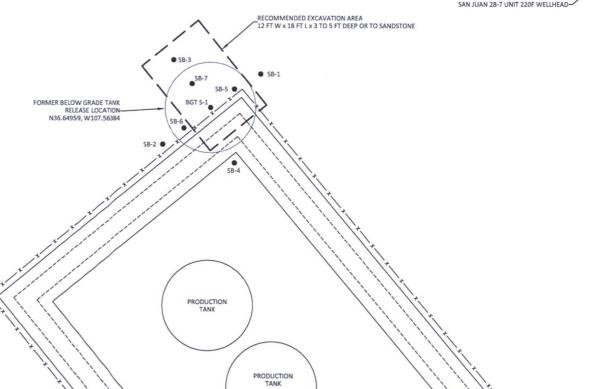
Sample ID	Date	Depth (ft)	OVM- PID (ppm)	TPH (mg/kg)	
NN	OCD ACTIO	100	100		
SB-1	SB-1 12/7/16 2.75 26.1 <		<20.0		
SB-2	12/7/16	3.0	0.1	<20.0	
SB-3	12/7/16	3.5	3.4	539	
38-3	12///10	5.5	198	470	
SB-4	12/7/16	3.75	2.7	<20.0	
SB-5	12/7/16	3.5	578	11,120	
SB-6	12/7/16	3.0	0.2	<20.0	
SB-7 12/7/16		2.75	1.278	24,900	

			Lab	oratory An	alytical Res	ults			
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH 418.1 (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH - MRO (mg/kg)	Chlorides (mg/kg)
NA	OCD ACTIO	N LEVEL	10	50	100	100			600
BGT S-1	10/24/16	3	<0.048	0.28	9,800	130	4,200	2,500	<30
SB-3	12/7/16	5.5	<0.025	<0.225	1,100	43	370	290	75
ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B, 418.1, 8015D AND 300.0									

#### NOTES AND RECOMMENDATIONS

- 1. NMOCD RISK RANK IS "10". HOWEVER, AT REQUEST OF NMOCD, STRICTEST CLOSURE REQUIREMENTS SPECIFIED IN NMAC 19.15.17.13E TABLE 1 ARE TO BE UTILIZED. ACTION LEVELS ARE: 100 mg/kg TPH, 10 mg/kg BENZENE, 50 mg/kg TOTAL BTEX, AND 600 mg/kg CHLORIDE.
- 2. ALL SOIL BORINGS WERE TERMINATED ON SANDSTONE RANGING FROM APPROXIMATELY 2.75 FEET TO 5.5 FEET BGS.
- 3. INITIAL RECOMMENDED EXCAVATED AREA WOULD BE APPROXIMATELY 12 FEET X 18 FEET X 3 TO 5 FEET DEEP OR TO SANDSTONE.
- 4. REMOVE ALL VISIBLY STAINED SOILS.
- USE OVM-PID ACTION LEVEL OF 100 ppm AND ON SITE FIELD SCREENING TO DETERMINE FINAL EXCAVATION EXTENTS.
- FOLLOWING COMPLETION OF EXCAVATION, COLLECT ADDITIONAL SAMPLES FOR CONFIRMATION.





### FIGURE 3

#### INITIAL ASSESSMENT SAMPLE LOCATIONS, RESULTS, AND RECOMMENDATIONS OCTOBER AND DECEMBER 2016

SAN JUAN 28-7 UNIT 220M SE¼ NW¼, SECTION 22, T28N, R7W RIO ARRIBA COUNTY, NEW MEXICO N36.64989, W107.56391



# animas environmental

Farmington, NM • Durango, CO animasenvironmental.com

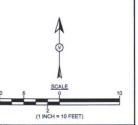
DRAWN BY:	DATE DRAWN:
S. Glasses	December 16, 2016
REVISIONS BY:	DATE REVISED:
C. Lameman	December 20, 2016
CHECKED BY:	DATE CHECKED:
E. McNally	December 20, 2016
APPROVED BY:	DATE APPROVED:
E. McNally	December 20, 2016

#### LEGEND

SOIL BORING LOCATIONS

==== SECONDARY CONTAINMENT BERM

-x - FENCE



Operator/Responsible Party,

The OCD has received the form C-141 you provided on regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number to 234034 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 <u>division-approved corrective action</u> 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 office in on or before on

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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Santa Fe, New Mexico 87505
505-476-3465

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