		NM C	IL CONSE	RVAT	ION			
istrict 1 25 N. French Dr., Hobbs, NM 88240	tl State of I N. French Dr., Hobbs, NM 88240			New MexicoRTESIA DISTRICT				
istrict II 11 S. First St., Artesia, NM 88210	Energy Minerals a						vised August 8, 2011	
<u>istrict III</u> 000 Rio Brazos Road, Aztec, NM 87410 istrict IV	Oil Conserv 1220 South		sion DRECEIV		ac	to appropriat cordance with	e District Office in 19.15.29 NMAC.	
220 S. St. Francis Dr., Santa Fe, NM 87505	, NM 8750		- 1-2					
JMW 1330950158 Re	lease Notification	and Cor	rective A	ction		****		
1AB1705939804		OPERAT				al Report	Final Report	
Name of Company EOG Y Resources Inc.	Contact Chase Settle							
Address	Telephone No.							
104 S. 4 th Street	575-748-1471							
Facility Name Livingston Ridge SWD Water Line	Facility Type Pipeline							
Sarface Owner	Mineral Owner			ΑΡΙΝο.				
Federal	Federal				<u> </u>			
	LOCATION			,		·		
nit Letter Section Township Range Feet from the Nort 1 22S 31E 2310				Vest Line East				
				<u> </u>		L		
	Latitude 32.42040	_Longitude_	103.73163					
	NATURE							
Type of Release Crude Oil & Produced Water	Volume of Release 5 B/O & 40 B/PW			Volume Recovered 2 B/O & 10 B/PW				
Source of Release	Date and Ho	our of Occurrent	æ	Date and Hour of Discovery				
Flow line Was Immediate Notice Given?	2/10/2017; AM 2/10/2017; AM 1f YES, To Whom?							
Yes No Not Required			Mike Bratcher, Crystal Weaver, and Shelly Tucker					
By Whom? Robert Asher	Date and Hour 2/10/2017; 7:27 PM (Email)							
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse.							
If a Watercourse was Impacted, Describe Ful Describe Cause of Problem and Remedial Ac								
A pressure gauge clamp had a gasket malfun		oustabout crew	vs were called.					
Describe Area Affected and Cleanup Action An approximate area of 90 feet by 60 feet wa	s affected around the valve s							
previous release had occurred and been reme any standing fluid and a backhoe contracted								
and horizontal delineation samples HAVE b	en taken (2/23/2017) and se	nt for analysis	of TPH, BTEX	, and ch	lorides. If	initial analyti	cal results for TPH	
& BTEX are under RRAL's (site ranking is) the RRAL's a work plan will be submitted to) a Final Report, C-141 will NMOCD. Depth to Grour	be submitted t nd Water: >10	to the OCD required to the	iesting c telv 150	losure. If	the analytical 1, T22S-R311	results are above E. per Trend	
Map), Wellhead Protection Area: No, Dist	ance to Surface Water Bod	ly: >1000', SI	FE RANKING	IS 0.			-	
I hereby certify that the information given al regulations all operators are required to repo	ove is true and complete to t t and/or file certain release r	the best of my	knowledge and	understa ctive ac	tions for re	rsuant to NM leases which	may endanger	
public health or the environment. The accept	tance of a C-141 report by th	e NMOCD ma	arked as "Final I	Report"	does not re	lieve the oper	rator of liability	
should their operations have failed to adequa or the environment. In addition, NMOCD a								
federal, state, or local laws and/or regulation			-	-			`	
			<u>OIL CON</u>	<u>ISER</u>	VATION	1 DIVISIC		
Signature					(11)	NO	/ INP	
Printed Name: Chase Settle			Environmental	Speciali	st M	BUCT	$V \sim \bigcirc$	
			Approval Date: 22817 Expiration Date: NIA					
E-mail Address: Chase_Settle@cogresources.com			Conditions of Approval:					
Date: February 24, 2017	2RP- Delineation report is ~							
Attach Additional Sheets If Necessary	Phone: 575-748-4171	neede	d befi	re	sife		, 2RP. L	
		rank	d befi	'n	bea	ssesse	d. ""	
			attae			285286		

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 2/24/17 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 3RP - 4129 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 II office in Artesia on or before 4/7/17. 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; C₆ thru C₃₆), 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; C₆ thru C₃₆), 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 OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us

Weaver, Crystal, EMNRD

From:	Chase Settle <chase_settle@eogresources.com></chase_settle@eogresources.com>
Sent:	Friday, February 24, 2017 2:26 PM
То:	Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; stucker@blm.gov; jamos@blm.gov
Cc:	Bob Asher; Amber Griffin; Veronica Alvarado
Subject:	Livingston Ridge SWD System C-141 Initial & Sundry
Attachments:	LivingstonRidgeSWDSystem_Sundry_Initial.pdf; LivingstonRidgeSWDSytem_C141_2017_ 02_10_Initial.pdf

Please find attached the C-141 Initial for the below listed location. Note that this release occurred on a site that already has been remediated for a release and has a synthetic liner installed underneath at 4' BSL. It should also be noted that samples were taken with a hand auger on 2/23/2017 to the depth of the liner and sent to an NMOCD approved laboratory for analysis.

Livingston Ridge Water System Section 1, T22S-R31E Eddy County, New Mexico

Thank you,

Chase Settle, M.S. Rep Safety & Environmental II

EOG Resources 105 S. 4th Street Artesia, NM 88210 575-748-4171 (Office) 575-703-6537 (Cell)



Bratcher, Mike, EMNRD

From:	Bob Asher <bob_asher@eogresources.com></bob_asher@eogresources.com>
Sent:	Friday, February 10, 2017 7:27 PM
То:	Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; stucker@blm.gov
Cc:	Amber Griffin; Chase Settle; Katie Parker; Veronica Alvarado
Subject:	Release Notification (Livingston Ridge Water System)

EOG Y Resources, Inc. is reporting a release at the following location (2/10/2017, 1:06 PM).

Livingston Ridge Water System Section 1, T22S-R31E Eddy County, New Mexico

Released: Approximately 5 B/O & 25 B/PW; Recovered: Unknown.

Cause of the release was from a poly water transfer line that malfunctioned. Vacuum truck(s) and roustabout crews were called. The release point is approximately 0.25 miles southwest of EOG's Unocal AHU Federal #1 Battery. A Form C-141 with complete information will be submitted.

Thank you.

Robert C. "Bob" Asher

Environmental Supervisor Safety & Environmental Department EOG Resources, Inc. Artesia Division Office 105 S. 4th Street Artesia, NM 88210 575-748-4217 (Office) 575-365-4021 (Cell) EOG Safety Begins With YOUR Safety

