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

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action												
						<b>OPERA</b>	ГOR	[	Initi	al Report	$\boxtimes$	Final Report
						Contact Lisa Hunter						
						Telephone No. 505-326-9786  Facility Type Oil Well						
F												
Surface Owner Jicarilla Tribe Mineral Owner						Jicarilla Tı		API No. 300-39-22745 Jicarilla Contract: 64				
			LOCA	ATIO	ON OF RELEASE RCVD SEP 19 '1					'14		
Unit Letter <b>D</b>	, , , , ,					South Line	East/West Line County West Rio Arriba					
L. —u			<del></del>	26.20			107 20222			OIL COM	15. D	
	Latitude36.39069Longitude107.28222 DIST. 3 NATURE OF RELEASE											
Type of Rele						Volume of		-		Recovered		
		Tank overflo	wed			Unknown	lour of Occurrenc			Hour of Dis 13 @ 1:00 ր		
Was Immedia	ate Notice (		Yes	No Not R	equired		nmond, Jicarilla	EPA				l
By Whom?	Lisa Hunt	er	-	<del></del>		Brandon Powell, NMOCD  Date and Hour 09-17-13						
by whem.	Disa Hu					Bryce Hammond @ 8:43 a.m. by phone and email follow up						
Was a Water	course Read	ched?		***************************************		Brandon Powell @ 8:50 a.m. – Courtesy Call  If YES, Volume Impacting the Watercourse.						
			Yes 🛚	No								
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.*	•		<u> </u>			·			
N/A												
I .		em and Reme			Water (	of which 2 bl	ols were recovere	d Fluid	s were co	entained W	Vell wa	e chut in
and water tr	uck recove	red free stan	ding fluid		vironm	ental will ass	ess impacted are					
Describe Are	a Affected:	and Cleanup A	Action Tak	en.*								
				tions are needed	l.							ļ
regulations al public health should their or or the environ	I operators or the envir operations h nment. In a	are required to ronment. The ave failed to a	o report ar acceptance adequately OCD accep	nd/or file certain reports of a C-141 report investigate and reports of the contract of the co	elease no ort by the emediate	otifications are NMOCD m contaminati	knowledge and und perform correct arked as "Final Root on that pose a threet the operator of response to the operator of response to the operator operator of response to the operator of response to the operator operator operator operator operator of response to the operator of response to the operator oper	tive actio eport" doc eat to gro	ns for rele es not reli und water	eases which leve the oper r, surface wa	may er rator of ater, hu	ndanger Tiability man health
Signature: Indoay ( yn ero						OIL CONSERVATION DIVISION						
Printed Name: Lindsay Dumas						Approved by Environmental Specialist:						
Title: Field Environmental Specialist						Approval Date: 9/25/14 Expiration Date:						
E-mail Addre	ess: Linds	say.Dumas@e	cop.com			Conditions of Approval:  Attached [						
Date: Septe	mber 17 <u>,</u> 2	01	Phone:	505-599-4089								
Attach Addi			ary		1	112511	17/824/	100				

December 11, 2013

Lindsay Dumas ConocoPhillips San Juan Business Unit Office 214-07 5525 Hwy 64 Farmington, New Mexico 87401

Via electronic mail to: SJBUE-Team@ConocoPhillips.com

**RE:** Release Assessment Report

Jicarilla 20 #9

Rio Arriba County, New Mexico

Dear Ms. Dumas:

On September 24, 2013, Animas Environmental Services, LLC (AES) completed a release assessment at the ConocoPhillips (CoP) Jicarilla 20 #9, located in Rio Arriba County, New Mexico. The release consisted of approximately 10 barrels (bbls) produced water, of which 2 bbls had been recovered.

## 1.0 Site Information

### 1.1 Location

Site Name - Jicarilla 20 #9

Legal Description – NW¼ NW¼, Section 20, T25N, R4W, Rio Arriba County, New Mexico Well Head Latitude/Longitude – N36.39076 and W107.28279, respectively Release Location Latitude/Longitude – N36.39092 and W107.28304, respectively Land Jurisdiction – Jicarilla Apache Nation

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, September 2013

# 1.2 Risk Ranking

The Jicarilla 20 #9 is located on Jicarilla Apache Nation lands, and soil remediation action levels are determined by the Jicarilla Apache Nation Oil and Gas Administration (JANOGA). JANOGA action levels for soils follow the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche Färmington, NM 87401 505-564-2281

> Durango, Colorado 970-403-3084

1993). Per JANOGA, all locations within Jicarilla Apache Nation lands receive a ranking score of 20:

- 100 ppm volatile organic compounds (VOCs); or 10 mg/kg benzene and 50 mg/kg total BTEX (benzene, toluene, ethylbenzene, and xylenes), and
- 100 mg/kg total petroleum hydrocarbons (TPH).

#### 1.3 Assessment

AES was initially contacted by Lisa Hunter of CoP on September 19, 2013, and on September 24, 2013, Ross Kennemer and Deborah Watson of AES completed the release assessment field work. The assessment included collection and field screening of eight soil samples and two composite samples from four borings in and around the release area. Sample locations and the estimated release area are presented on Figure 3.

## 2.0 Soil Sampling

A total of eight soil samples (SB-1 through SB-4) and two composite samples (SC-1 and SC-2) were collected during the assessment. All soil samples were field screened for VOCs and were also analyzed for TPH. Composite samples SC-1 and SC-2 were field screened for chlorides.

# 2.1 Field Screening

## 2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

#### 2.1.2 Total Petroleum Hydrocarbons

Field TPH samples were analyzed per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.

#### 2.1.3 Chlorides

Soil sample SC-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

## 2.2 Field Screening Results

On September 24, 2013, initial assessment field screening results for VOCs via OVM showed concentrations measured 0.0 ppm for all samples. Field TPH concentrations ranged from 36.1 mg/kg in SB-1 to 68.1 mg/kg in SB-2. Results are included below in Table 1 and on Figure 3. The AES Field Screening Report is attached.

Table 1. Field Screening VOCs, TPH, and Chloride Results Jicarilla 20 #9 Initial Release Assessment

September 2013

Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)					
		100	100	NE					
0/24/42	0.5	0.0	36.1	NA					
9/24/13 -	2.0	0.0	61.4	NA					
9/24/13 -	0.5	0.0	60.1	NA					
	2.0	0.0	68.1	NA					
9/24/13 -	0.5	0.0	52.1	NA					
	2.0	0.0	61.4	NA					
0 (0.4 (4.0	0.5	0.0	41.4	NA					
9/24/13 -	2.0	0.0	64.1	NA					
9/24/13	0.5	NA	NA	80					
9/24/13	2.0	NA	NA	80					
	9/24/13 - 9/24/13 - 9/24/13 - 9/24/13 - 9/24/13 -	Date Sampled       Depth (ft bgs)         JANOGA Action Level* $9/24/13$ 0.5 $9/24/13$ 0.5 $2.0$ 0.5 $9/24/13$ 0.5 $9/24/13$ 0.5 $9/24/13$ 0.5 $9/24/13$ 0.5 $9/24/13$ 0.5	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Date Sampled         Depth (ft bgs)         via OVM (ppm)         TPH (mg/kg)           JANOGA Action Level*         100         100 $9/24/13$ 0.5         0.0         36.1 $9/24/13$ 0.5         0.0         61.4 $9/24/13$ 0.5         0.0         68.1 $9/24/13$ 0.5         0.0         52.1 $9/24/13$ 0.5         0.0         41.4 $9/24/13$ 0.5         NA         NA $9/24/13$ 0.5         NA         NA					

NA=Not Analyzed

#### 3.0 Conclusions and Recommendations

On September 24, 2013, AES conducted an initial assessment of impacted soils associated with a produced water release at the Jicarilla 20 #9. Action levels for releases are determined by JANOGA, which refers to the *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) for site rank of 20. Initial assessment field screening results were reported below the JANOGA action level of 100 ppm VOCs and 100 mg/kg TPH in each sample. Chloride concentrations were reported at 80 mg/kg in both SC-1 and SC-2.

<sup>\*</sup>Action level determined by JANOGA (Ref. NMOCD ranking score of 20 per NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993).

Lindsay Dumas Jicarilla 20 #9 Release Assessment Report December 11, 2013 Page 4 of 4

Based on field screening results for VOCs, TPH, and chlorides, no further work is recommended at the Jicarilla 20 #9.

If you have any questions about this report or site conditions, please do not hesitate to contact Deborah Watson at (505) 564-2281.

Sincerely,

**David Reese** 

**Environmental Scientist** 

Dail of Reve

Elizabeth McNally, PE

## Attachments:

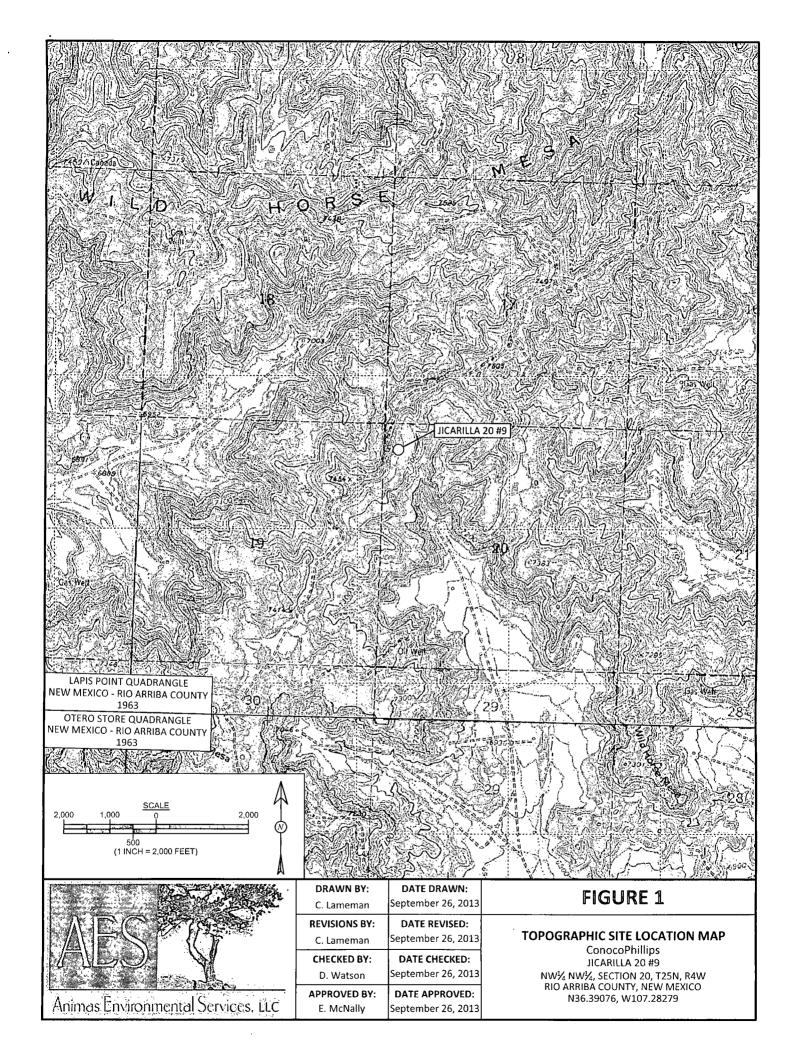
Figure 1. Topographic Site Location Map

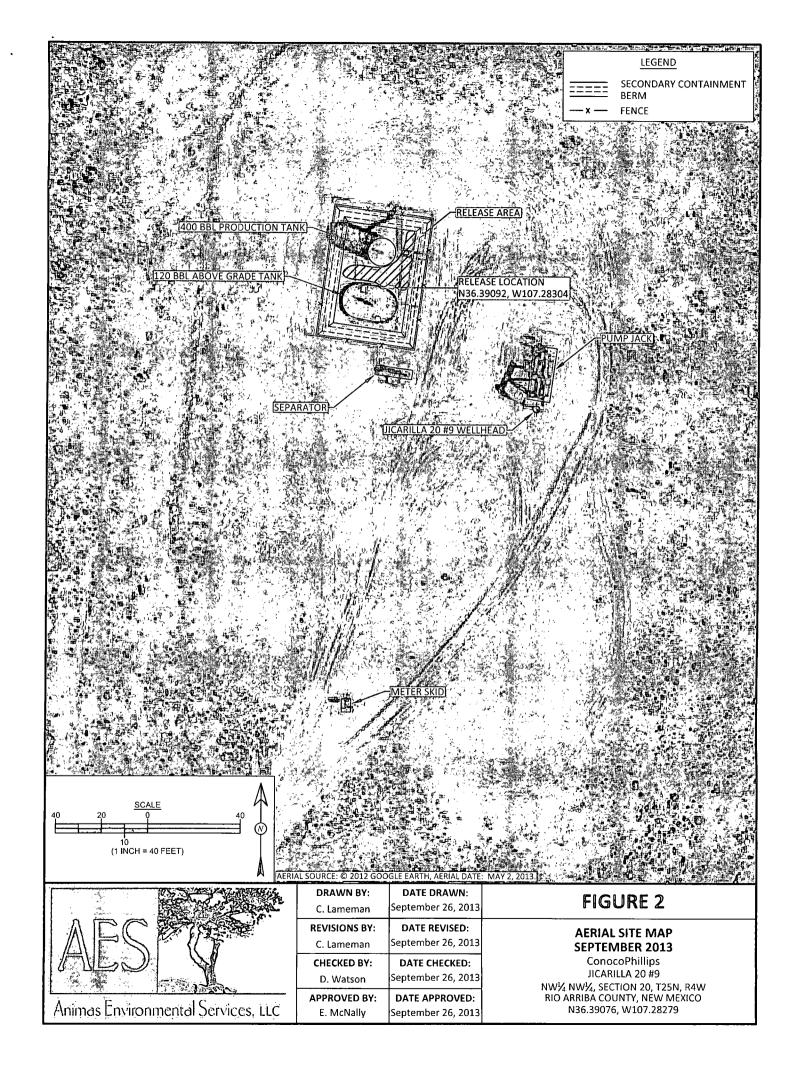
Figure 2. Aerial Site Map, September 2013

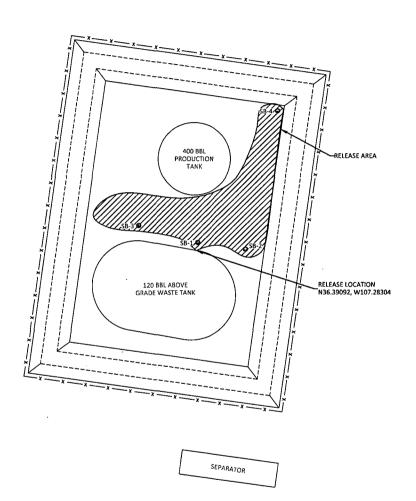
Figure 3. Assessment Sample Locations and Results, September 2013

AES Field Screening Report 092413

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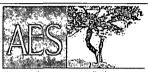


Field Screening Results								
Sample ID	Date	Depth (ft)	OVM- PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)			
	JANOGA AC	100	100	NE				
SB-1	9/24/13	0.5	0.0	36.1	NA.			
28-1	9/24/13	2	0.0	61.4	NA			
SB-2	9/24/13	0.5	0.0	60.1	NA			
5B-2	9/24/13	2	0.0	68.1	NA			
SB-3	9/24/13	0.5	0.0	52.1	NA			
20-2	9/24/13	2	2 0.0		NA			
SB-4	9/24/13	0.5	0.0	41.4	NA			
3B-4	9/24/13	2	0.0	64.1	NA			
SC-1	9/24/13	0.5	NA	NA	80			
SC-2	9/24/13	2	NA	NA	80			

SC-1 AND SC-2 ARE COMPOSITE SAMPLES OF S-1 THROUGH S-4. NA - NOT ANALYZED

## FIGURE 3

ASSESSMENT SAMPLE
LOCATIONS AND RESULTS
SEPTEMBER 20.3
ConocoPhillips
JICARILLA 20 #9
NWY, NWY, SECTION 20, T25N, R4W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39076, W107.28279



Animas Environmental Services, LLC

	DRAWN BY:	DATE DRAWN:				
	C. Lameman	September 26, 2013				
	REVISIONS BY:	DATE REVISED:				
	C. Lameman	September 26, 2013				
	CHECKED BY:	DATE CHECKED: September 26, 2013				
1	D. Watson					
1	APPROVED BY:	DATE APPROVED:				
-	E. McNally	September 26, 2013				

#### LEGEND

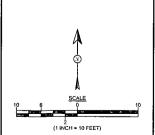
SAMPLE LOCATIONS (SOIL BORINGS)

SECONDARY CONTAINMENT BERM

-x - FENCE



JICARILLA 20 #9 WELLHEAD -



# **AES Field Screening Report**

Client: ConocoPhillips

Project Location: Jicarilla 20 #9

Date: 9/24/2013

Matrix: Soil



Animas: Environmental Services, LLC

www.animasenvironmental.com

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> Durango, Colorado 970-403-3084

Sample ID	Collection Date	Sample Collection	OVM (ppm)	Chloride (mg/kg)	Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	Analysts Initials		
SB-1 @ 0.5'	9/24/2013	12:00	0.0	NA	12:43	36.1	20.0	1	DAW		
SB-1 @ 2'	9/24/2013	12:03	0.0	NA	12:45	61.4	20.0	1	DAW		
SB-2 @ 0.5'	9/24/2013	12:58	0.0	NA	13:44	60.1	20.0	1	DAW		
SB-2 @ 2'	9/24/2013	13:00	0.0	NA	13:51	68.1	20.0	1	DAW		
SB-3 @ 0.5'	9/24/2013	13:02	0.0	NA	13:54	52.1	20.0	1	DAW		
SB-3 @ 2'	9/24/2013	13:05	0.0	NA	13:57	61.4	20.0	1	DAW		
SB-4 @ 0.5'	9/24/2013	13:08	0.0	NA	14:01	41.4	20.0	1	DAW		
SB-4 @ 2'	9/24/2013	13:10	0.0	NA	14:03	64.1	20.0	1	DAW		
SC-1 @ 0.5'	9/24/2013	14:10	NA	80	Not Analyzed for TPH.						
SC-2 @ 2'	9/24/2013	14:15	NA	80	Not Analyzed for TPH.						

DF

Dilution Factor

NA

Not Analyzed

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitation Limit

\*Field TPH concentrations recorded may be below PQL.

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver

Dibnah Watu

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

Page 1

Report Finalized: 9/24/13