



ENVIRONMENTAL PLUS, INC.
CONSULTING AND REMEDIAL CONSTRUCTION

11 March 2011

HOBBS OCD

JUL 11 2011

RECEIVED

Mr. Geoffrey Leking
Environmental Engineer
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

RE: Remediation Proposal

ConocoPhillips Company – VAC ABO Well #13-16 Release Area
UL-D (NW1/4 of the NW1/4) of Section 04, T 18 S, R 35 E; Lea County, New Mexico
Longitude: 32° 46' 49.99"; Latitude: 103° 28' 11.64"
EPI Ref. #150030

Dear Mr. Leking:

On February 9, 2011 at 16:00 p.m. approximately 2-barrels (bbls) of produced water and 16-bbls of petroleum products were released from a ruptured 3" polyethylene surface flow line. Approximately 1-bbl of produced water and 9-bbls of petroleum product were recovered. The combined fluids covered a release area of $\pm 12,300$ square feet. After initial vacuuming of fluids, ConocoPhillips retained the services of Environmental Plus, Inc., (EPI) to GPS survey, photograph and assess product/water impacts of the release area. This letter report provides a Remediation Proposal.

Site Background

Although the release was from VAC ABO #13-16 surface production flowline, the release area is in the near vicinity (± 150 -feet southeast) of injection well VAC ABO #13-21. Hence, legal descriptions of release area will relate to that well. The release area is located in Section 04, T18S, R35E at an approximate elevation of 3,951 feet above mean sea level (amsl). The property is owned by the State of New Mexico and managed by the New Mexico State Land Office (NMSLO). A search for water wells was completed utilizing the New Mexico Office of the State Engineers website and a database maintained by the United States Geological Survey (USGS). No water wells (domestic, agriculture or public) or bodies of surface water exist within a 1,000 feet radius of the release area (reference Figure 2). Groundwater data indicates the average water depth is approximately 60 feet below ground surface (bgs). Based on available information, it was determined the vertical distance between impacted soil and groundwater is approximately 55 feet. Utilizing this information, New Mexico Oil Conservation Division Remedial Threshold Goals (NMOCD Goals) for this Site were determined as following:

2100 AVE O ~ PO BOX 1558 ~ EUNICE, NM 88231

PHONE (575) 394-3481 * (575) 394-2601 FAX

4160

approved by:
Geoffrey Leking
Env. Engineer
NME MNRD - OCD
DIST 1 - HOBBS
07/11/11

ENVIRONMENTAL PLUS, INC.



Parameter	NMOCD Goals
Benzene	10 mg/Kg
BTEX	50 mg/Kg
TPH	100 mg/Kg
Chlorides	250 mg/Kg

Field Work

On March 1, 2011 EPI visited the Release Area to conduct GPS survey and assess surface area damage. Having recently completed remediation activities in the Buckeye area [ConocoPhillips EVGSAU #29-13-006 Release Area located in UL-P (SE1/4 Of the SE1/4) of Section 29, T17S, R35E], EPI concluded delineation via trenching or soil borings was not required. Dense rock formations which commence approximately four (4) inches and extend over fifteen (15) feet below ground surface (bgs) limit vertical migration of production fluids. Based on related experience, impacted area should be limited to less than five (5) vertical feet. This concept is advanced by efficiency of cleanup efforts in vacuuming the release area leaving little amount of production fluids for sub-surface seepage..

Analytical Data

Owing to rapid response in surficial cleanup efforts, no soil samples were collected for field testing or laboratory analysis.

Site Remedial Proposal

EPI proposes remediating the release area in its entirety. Citing previous experience, the area will be excavated via use of a combination of track hoe with rock bucket and hammer hoe. The release area will be excavated to whatever depth and width is necessary for removal of impacted material. Impacted material will be transported to a state approved land farm for remediation or disposal dependent on major type of contaminant, i.e., TPH or chloride concentrations. Field tests will be conducted to assist in determining physical limits of contaminated area.

A portion of soil samples collected from sidewalls and bottom during excavation activities will be field analyzed for TPH and chloride concentrations. Soil samples collected for field testing of organic vapors will be placed in self sealing polyethylene bags and allowed to equilibrate to ~ 70° F. Soil samples will then be tested for organic vapors utilizing a MiniRae™ Photoionization Detector (PID) equipped with a 10.6 electron-volt (eV) lamp and calibrated for benzene response. Analysis for chloride concentrations will be conducted using a LaMotte Chloride Kit (titration method).

After field analysis for TPH and chloride concentrations have determined physical limits of contamination, soil samples will be collected for confirmatory laboratory analytical results. Soil samples designated for laboratory analysis are immediately inserted into laboratory provided containers, appropriately labeled, placed in coolers, iced down and transported to an independent laboratory for quantification of BTEX (benzene, toluene, ethylbenzene and total xylenes), TPH [Gasoline Range Organics (GRO) and Diesel Range Organics (DRO)] and chloride concentrations.



Upon receipt of laboratory analytical results confirming BTEX, TPH and chloride concentrations are below NMOCD Goals, backfilling activities will commence.

Excavated areas will be backfilled with top soil free of deleterious material, rocks and large clods. This material will be transported from a local pit in the Buckeye area to the job site. Backfill will be slightly mounded in the middle sloping peripherally to meet original ground surface. Disturbed areas will be contoured to blend with natural ground and prevent wind/water erosion. The entire disturbed area will be deep drill seeded with a blend approved by the NMSLO. However, EPI recommends seeding operations be completed late spring 2011 when weather and ground conditions are more conducive to vegetative growth.

Should you have technical questions, concerns or need for additional information, please contact me at (575) 394-3481 (office), (575) 441-7802 (cellular) or via e-mail at dduncanepi@gmail.com. Official communications should be directed to Mr. John Gates at (575) 391-3158 (office), (575) 390-4821 (cellular) or via e-mail at John.W.Gates@conocophillips.com with correspondence addressed to:

Mr. John W. Gates
HSER Lead
Permian-Buckeye Operations
29 Vacuum Complex Lane
Lovington, New Mexico 88260-9664

Sincerely,

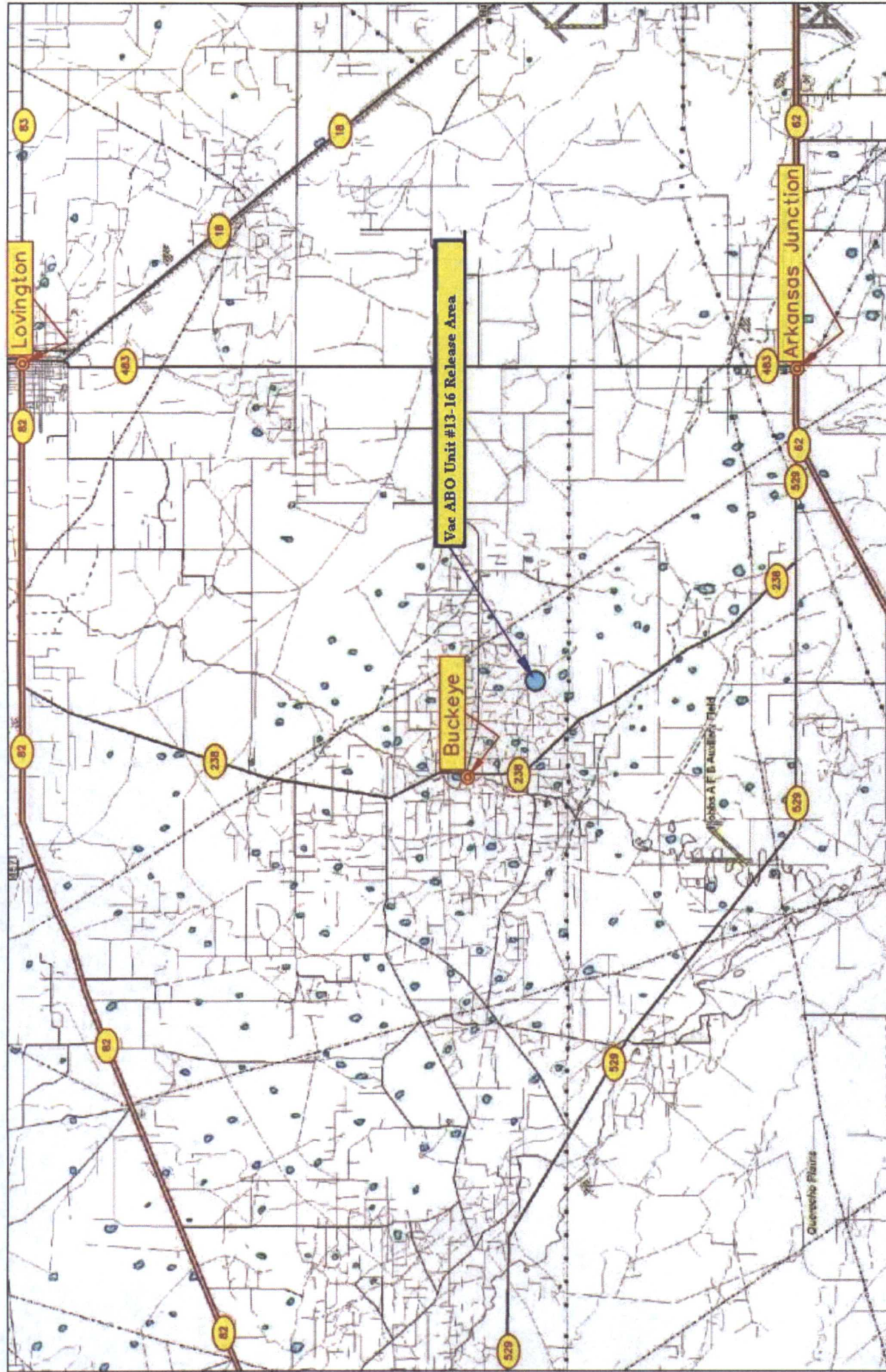
ENVIRONMENTAL PLUS, INC.,

David P. Duncan
Civil Engineer
EPI Project Manager

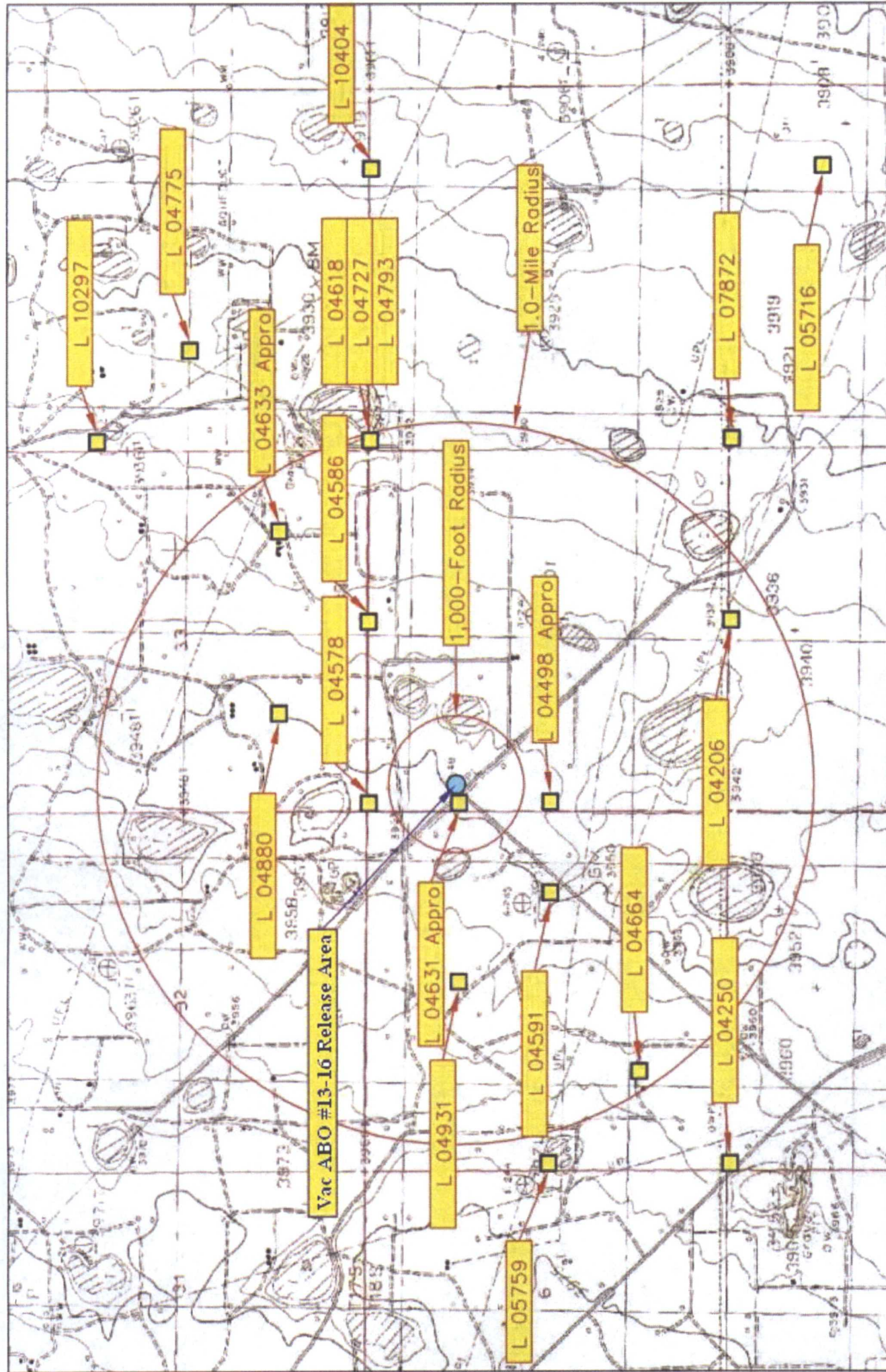
Cc: Mr. John W. Gates, HSER Lead – ConocoPhillips
Ms. Myra Harrison, Land Manager – NMSLO
Roger Boone, Operations Manager - EPI

Encl: Figure 1 - Area Map
Figure 2 – Site Location Map
Figure 3 – Release Area Map
Table 1 – Well Data
Attachment I – Copy of Initial NMOCD Form C-141

FIGURES



<p>Figure 1 Area Map ConocoPhillips Vacuum ABO Unit #16-13 Release Area</p>	<p>Lea County, New Mexico NW 1/4 of the NW 1/4, Sec. 4, T18S, R35E N 32° 46' 49.99" W 103° 28' 11.64" Elevation: 3,948 feet amsl</p>	<p>DWG By: Daniel Dominguez March 2006</p> <p>REVISED:</p> <p>0 3 6 SHEET 1 of 1</p> <p>Miles</p>
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<p>Figure 2 Site Location Map ConocoPhillips Vacuum ABO Unit #13-16 Release Area</p>	<p>Lea County, New Mexico NW 1/4 of the NW 1/4, Sec. 4, T18S, R35E N 32° 46' 49.99" W 103° 28' 11.64" Elevation: 3,948 feet amsl</p>	<p>DWG By: Daniel Dominguez March 2006</p> <p>REVISED:</p> <p>0 2000 4000 SHEET 1 of 1</p> <p>Feet</p>
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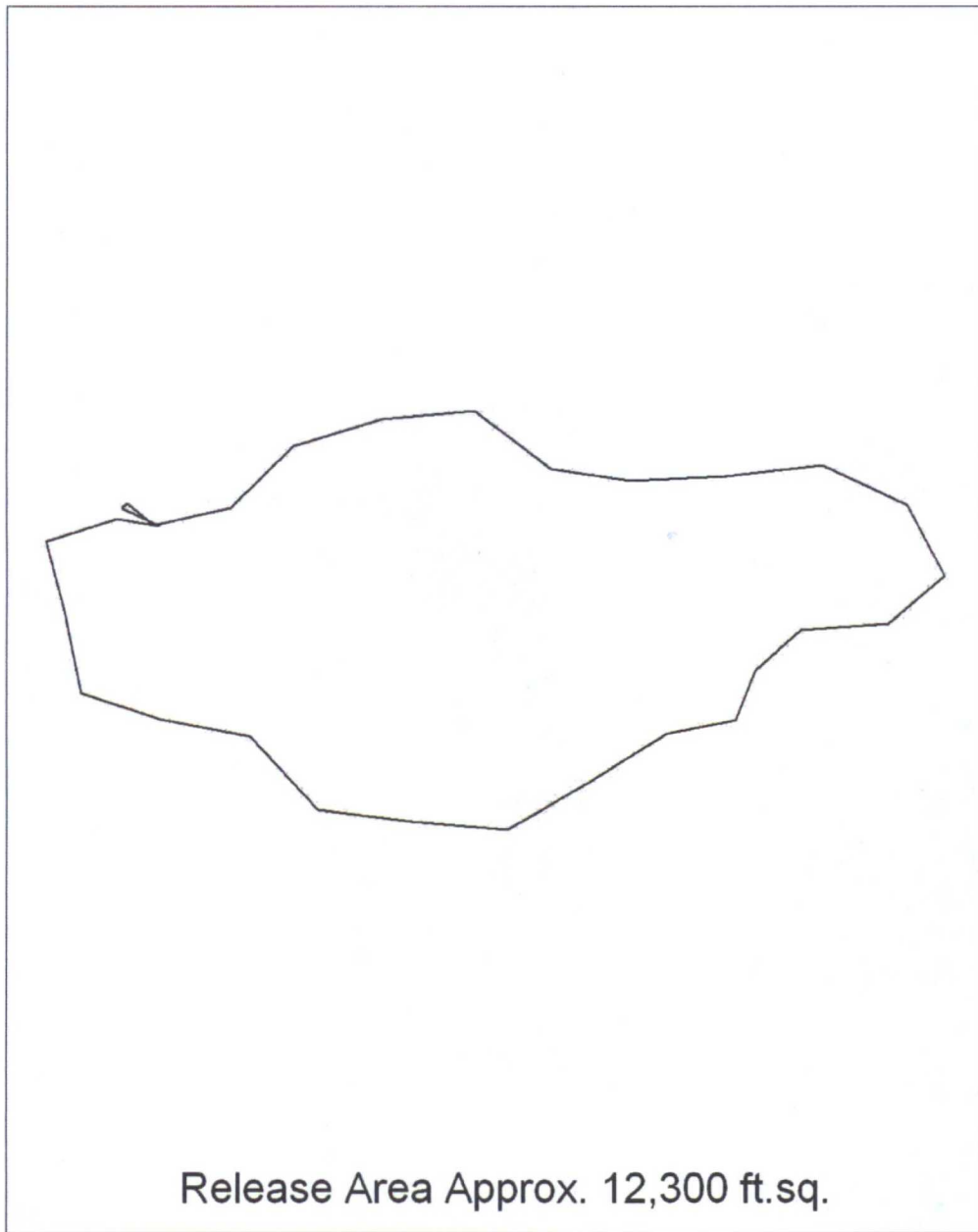


Figure 3

Lat/Long
WGS 1984



Scale 1:500
0 60.00
Feet

VAC ABO #13-16 Release.ssf
3/4/2011

GPS Pathfinder[®] Office
 **Trimble**[™]

TABLES

TABLE 1

Well Data

ConocoPhillips - Vacuum ABO Unit Well #13-16 Release Area (Ref. # 150030)

Well Number	Diversion ^A	Owner	Use	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation ^B	Depth to Water (ft bgs)
L 04206	3	JOHNN DRILLING CO.	PRO	18S	35E	04 4 3	N32° 46' 10.14"	W103° 27' 43.55"	09-Jul-59	3,940	50
L 04498 APPRO	0	LOFFLAND BROTHERS COMPANY	PRO	18S	35E	04 1 3	N32° 46' 36.37"	W103° 28' 14.63"	09-Aug-60	3,950	70
L 04631 APPRO	0	A. W. THOMPSON INC.	PRO	18S	35E	04 1 1 2	N32° 46' 49.43"	W103° 28' 14.69"	17-Apr-61	3,951	60
L 07872	0	ENERGY RESERVES GROUP INC.	PRO	18S	35E	03 3 3 1	N32° 46' 10.01"	W103° 27' 12.59"	07-Apr-78	3,930	62
L 04250	3	CACTUS DRILLING CORP. OF TEXAS	PRO	18S	35E	5	N32° 46' 10.38"	W103° 29' 16.56"	27-Aug-59	3,966	60
L 04591	3	SHARP DRILLING COMPANY	PRO	18S	35E	05 2 4	N32° 46' 36.43"	W103° 28' 30.11"	01-Feb-61	3,954	75
L 04664	3	HONDO DRILLING COMPANY	PRO	18S	35E	05 3 2	N32° 46' 23.45"	W103° 29' 1.06"	16-Jun-61	3,967	70
L 04931	0	MOBIL OIL CORPORATION	SRO	18S	35E	05 2 1	N32° 46' 49.55"	W103° 28' 45.61"	07-Mar-81	3,963	70
L 05759	0	PHILLIPS PET. CO.	PRO	18S	35E	05 1 3	N32° 46' 36.60"	W103° 29' 16.56"		3,970	
L 05716	0	MORAN OIL PRODUCING & DRILLING	PRO	18S	35E	10 2 2	N32° 45' 56.80"	W103° 26' 25.73"	09-Aug-65	3,915	49
L 04578	3	SHOENFELD-HUNTER-KITCH DRLG.CO	PRO	17S	35E	33	N32° 47' 2.45"	W103° 28' 14.75"	12-Jan-61	3,957	60
L 04586	3	HONDO DRILLING	PRO	17S	35E	33 4 3 3	N32° 47' 2.29"	W103° 27' 43.86"	18-Jan-61	3,947	50
L 04633 APPRO	0	HONDO DRILLING COMPANY	PRO	17S	35E	33 4 2	N32° 47' 15.34"	W103° 27' 28.42"	20-Apr-61	3,940	65
L 04880	0	HONDO DRILLING CO.	PRO	17S	35E	33 3 2	N32° 47' 15.52"	W103° 27' 59.30"	18-Apr-62	3,950	90
L 04618	3	A. W. THOMPSON INC.	PRO	17S	35E	34 3 3	N32° 47' 2.13"	W103° 27' 12.97"	31-Mar-61	3,931	55
L 04727	3	NOBLE DRILLING CORPORATION	PRO	17S	35E	34	N32° 47' 2.13"	W103° 27' 12.97"	05-Oct-61	3,931	45
L 04775	3	DALE MOUNT DRILLING COMPANY	PRO	17S	35E	34 1 4	N32° 47' 28.34"	W103° 26' 57.43"	11-Dec-61	3,934	33
L 04793	3	PHILLIPS PETROLUM CO.	PRO	17S	35E	34	N32° 47' 2.13"	W103° 27' 12.97"	30-Jan-62	3,931	50
L 10297	3	LASCO CONSTRUCTION	SAN	17S	35E	34 1 1 3	N32° 47' 41.50"	W103° 27' 12.94"	20-Feb-92	3,940	42
L 10404	3	LEE CATTLE COMPANY LTD.	STK	17S	35E	34 4 4 2	N32° 47' 2.05"	W103° 26' 26.35"	24-Jul-94	3,924	115
L 10304	0	YATES PETROLEUM	PRO	18S	35E	09 4 4 1	N32° 45' 17.63"	W103° 27' 27.68"	01-Feb-93	3,931	72

^B = Elevation interpolated from USGS topographical map based on referenced location.

PRO = 72-12-1 Prospecting or development of natural resource

SRO = Secondary recovery of oil

SAN = 72-12-1 Sanitary in conjunction with commercial use

STK = 72-12-1 Livestock watering

quarters are 1=NE, 2=SE, 3=SW, 4=SE; quarters are biggest to smallest

Shaded area indicates wells not shown in Figure 2

ATTACHMENTS

District I
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

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company ConocoPhillips Company	Contact John W. Gates
Address 3300 North A St. Bldg 6, Midland, TX 79705-5406	Telephone No. 505.391.3158
Facility Name VAC ABO Well # 13-16	Facility Type Oil and Gas
Surface Owner State Of New Mexico	Mineral Owner State Of New Mexico
Lease No 30-025-03072	

LOCATION OF RELEASE

Unit Letter I	Section 5	Township 18 S	Range 35E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude

Longitude

NATURE OF RELEASE

Type of Release Crude Oil And Produced Water	Volume of Release 18bbl (16oil, 2water)	Volume Recovered (9oil, 1water)
Source of Release 3 inch poly flow line parted due to extreme cold temperature	Date and Hour of Occurrence 2/9/11 1600	Date and Hour of Discovery 2/9/11 1630
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD	
By Whom? John Gates	Date and Hour 2/11/11 0900	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* . ~16 bbls of oil and ~2 bbls of produced water were released from a parted 3inch poly flow line due to extreme cold temperatures.		
Describe Area Affected and Cleanup Action Taken.* The affected area is an 80' X 50' X 2" area of pasture land. A vacuum truck was called to pick up standing fluids. ~9 bbls of oil and 1 bbl of produced water were recovered. A work order has been generated to repair the failed section of flow line		
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: 	OIL CONSERVATION DIVISION	
Printed Name: John W. Gates	Approved by District Supervisor:	
Title: HSER Lead	Approval Date:	Expiration Date:
E-mail Address: John.W.Gates@conocophillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 2/11/11 Phone: 505.391.3158		

• Attach Additional Sheets If Necessary