



ENVIRONMENTAL PLUS, INC.

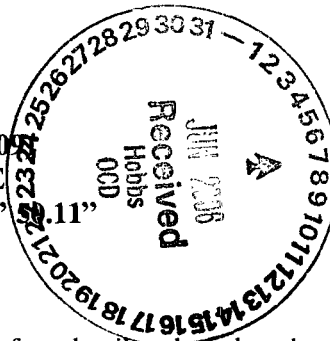
CONSULTING AND REMEDIAL CONSTRUCTION

June 5, 2006

Mr. Larry Johnson
New Mexico Oil Conservation Division
1625 French Drive
Hobbs, NM 88240

**RE: Conoco Phillips Lockhart B-28 Well #6 (Ref. #150009)
UL-A (NE¼ of the NE¼ of Section 28, T21S, R36E)
Latitude N 32° 27' 19.16" and Longitude W 103° 15' 11"**

WORK PLAN



Dear Mr. Johnson:

On July 17, 2004, a release of approximately 22 barrels (bbls) of crude oil and produced water occurred at the Lockhart B-28 Well #6 from a flow line due to overnight freezing. Upon discovery, ConocoPhillips retained a vacuum truck to recover approximately 15 bbls of free liquids and utilized a backhoe to excavate saturated soil from the well pad and spread sand on the impacted pasture area. The initial NMOCD C-141 indicated approximately 2,220-square feet of well pad and 1,200-square feet of pasture were impacted by the release. ConocoPhillips retained Environmental Plus, Inc. (EPI) in February 2005 to delineate the vertical and horizontal extent of impacted soil at the site. This letter report documents the results of the delineation activities and recommends how to proceed with the remediation of the impacted soil.

Site Background

The site is located in the NE¼ of the NE¼ of Section 28, Township 21 South, Range 36 East at an elevation of approximately 3,554 feet above mean sea level (reference *Figures 1 and 2*). The property owner is the U.S. Government- Bureau of Land Management. A search for area water wells was completed utilizing the *New Mexico Office of the State Engineers* website and a United States Geological Survey water well database. There were no records found for water wells in Section 28; a total of 14 wells were found in T21S, R36E. The average depth to water in these wells was reported to be approximately 140 feet (reference *Table 1*). No water supply wells or bodies of surface water were found to be located within a 1,000-foot radius of the release location. Based on available information it was determined that the distance between the contamination and groundwater was between >100 feet. Utilizing this information, it was determined the New Mexico Oil Conservation Division (NMOCD) Remedial Goals for this site were as follows:

Parameter	Remedial Goal
Benzene	10 parts per million
BTEX	50 parts per million
TPH	5,000 parts per million

Chloride residuals may not be capable of impacting groundwater above the NMWQCC groundwater standard of 250 mg/L.

Field Work

EPI was on site February 2, 2005 to perform site assessment activities (i.e., photograph and GPS release area). To delineate the vertical and horizontal extent of impacted soil, on April 18, 2005, EPI personnel collected soil samples at six-inch and two-feet below ground surface (bgs) in seven sample locations. A portion of each sample was placed in a laboratory provided container and immediately placed on ice for transport. Select samples were submitted to Cardinal laboratories of Hobbs, New Mexico, for quantification

incident - n PAC0616547606

application - PAC0616547785

RP# 919

... EUNICE, NEW MEXICO 88231
... FAX 505.394.2601

ENVIRONMENTAL PLUS, INC.

of benzene, toluene, ethylbenzene and total xylenes (BTEX), gasoline range organics (GRO), diesel range organics (DRO) and chlorides.

The remaining portion of each sample were analyzed in the field for the presence of organic vapors utilizing a MiniRae[®] photoionization detector (PID) equipped with a 10.6 electron-volt (eV) lamp and chloride concentrations utilizing a La Motte Chloride test kit.

Analytical Data

Field analytical data indicated organic vapor concentrations ranged from 0.0 to 10.2 parts per million (ppm). Field chloride analyses indicated a range of 400 to 440 milligrams/kilogram (mg/Kg) in the release area and 400 mg/Kg in the background.

Laboratory analytical results indicated TPH and BTEX constituents were below each analytes' NMOCD remedial threshold (reference *Table 2*). Reported chloride concentrations ranged from 96 to 560 mg/Kg.

Conclusions

Field and laboratory analyses indicated soil hydrocarbon concentrations were below each analytes' NMOCD remedial guidelines. Based on depth to groundwater (i.e., >100-ft), chloride residuals remaining in the soil will not be capable of impacting groundwater above the NMWQCC groundwater standard.

Recommendations

Based on field and analytical results, it is recommended that soil within the release area be excavated to a maximum depth of two-feet bgs (i.e., 1,060-cubic yards) to prevent leaching/runoff from the well pad and to facilitate surface restoration in the pasture. Upon completion of excavation activities, excavated soil will be transported to a State approved facility for disposal. Upon completion of excavation activities, the excavation basin will be backfilled with clean soil obtained from an off-site source, contoured to allow natural drainage and seeded with a blend preferred by the BLM.

Should you have any questions or concerns, please feel free to contact me at (505) 394-3481 or via e-mail at iolness@hotmail.com. Upon your approval, EPI will initiate the next phase of the remediation. All official correspondence should be submitted to John Abney at:

John Abney, SHEAR Specialist
Conoco Phillips
1410 Northwest County Road
Hobbs, NM 88240

(505) 391-3128
John.H.Abney@conocophillips.com

Sincerely,

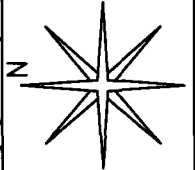
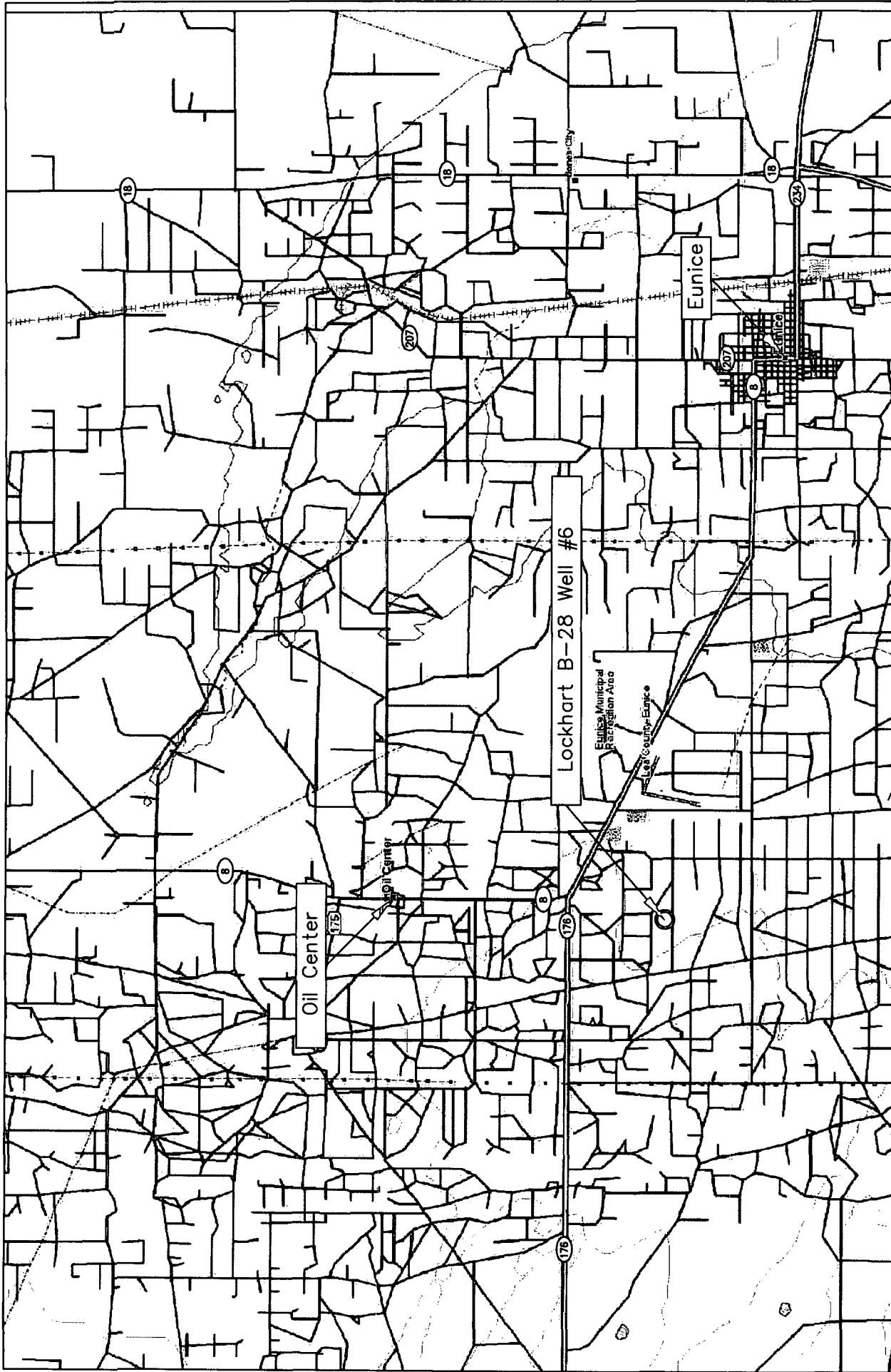
ENVIRONMENTAL PLUS, INC.



Iain A. Olness, P.G.
Hydrogeologist

cc: Paul Evans, BLM – Carlsbad, NM
John Abney, ConocoPhillips – Hobbs, NM
C. John Coy, ConocoPhillips – Hobbs, NM
File

encl. Figure 1 – Area Map
Figure 2 – Site Location Map
Figure 3 – Site Map
Figure 4 – Sample Location Map
Table 1 – Well Data
Table 2 – Summary of Excavation Analytical Results
Attachment I – Laboratory Results and Chain-of-Custody Form
Photographs
Attachment II – Copy of Initial C-141



REVISED:

DWG By: Jason Stegemoller
April 2006

0 1.5 3.0
Miles

SHEET
1 of 1

Lea County, New Mexico
NE 1/4 of the NE 1/4, Sec. 28, T21S, R36E
N 32° 27' 19.16" W 103° 15' 50.11"
Elevation: 3,554 feet amsl

Figure 1
Area Map
ConocoPhillips
Lockhart B-28 Well #6

Release Area
(~14,200-sq.ft.)

Q Road

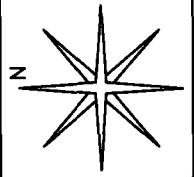


Well Pad
(~14,200-sq.ft.)

LEGEND

-Q Road- Access Road

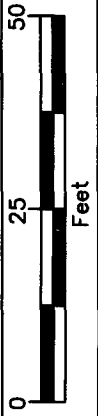
⊙ Oil Well



REVISED:

DWG By: Jason Stegemoller
April 2006

SHEET
1 of 1



Lea County, New Mexico

NE 1/4 of the NE 1/4, Sec. 28, T21S, R36E

N 32° 27' 19.16" W 103° 15' 50.11"

Elevation: 3,554 feet amsl

Figure 3

Site Map

ConocoPhillips

Lockhart B-28 Well #6

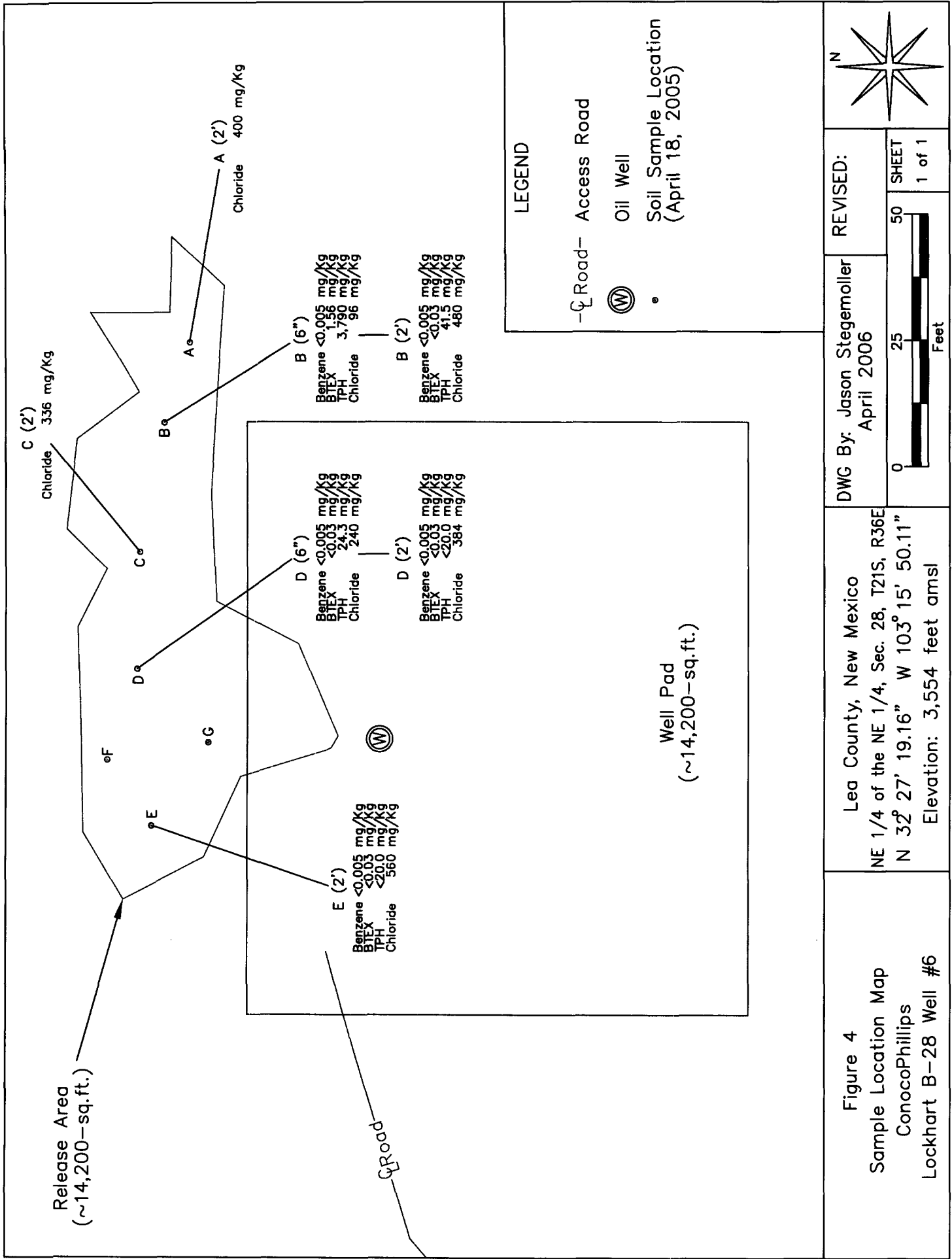


TABLE 1

Well Data

Conoco Phillips- Lockhart B-28 Well #6 (Ref. #150009)

Well Number	Diversion ^A	Owner	Use	Source	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation ^B (ft amsl)	Depth to Water (ft bgs)
USGS #1	--	--	--	--	21 S	36 E	9 2 2 2	--	--	18-Mar-68	3,595	119.36
USGS #2	--	--	--	--	21 S	36 E	9 2 2 2	--	--	28-Feb-96	3,595	200.43
USGS #3	--	--	--	--	21 S	36 E	9 2 2 2	--	--	20-Mar-86	3,595	203.72
CP 00692 EXP	0	W. L. Van Noy	DOM	--	21 S	36 E	10 1 1 3	N 32° 29' 48.76"	W 103° 15' 40.54"	--	3,595	--
CP 00734	3	W. L. Van Noy	DOM	Shallow	21 S	36 E	10 1	N 32° 29' 35.71"	W 103° 15' 40.54"	22-Jun-88	3,585	200
CP 00685 ENLRG	0	Will J. McCasland	COM	--	21 S	36 E	11 4 2	N 32° 29' 22.71"	W 103° 13' 52.54"	--	3,565	--
CP 00685 (1) EXP	0	Chevron USA, Inc.	PRO	--	21 S	36 E	11 4 2	N 32° 29' 22.71"	W 103° 13' 52.54"	--	3,565	--
CP 00505	3	Snyder Ranches, Ltd.	STK	--	21 S	36 E	16 2	N 32° 28' 43.53"	W 103° 16' 11.43"	10-Jul-72	3,605	195
CP 00676	0	Joe E. Sims	DOM	Shallow	21 S	36 E	18 4 4 1	N 32° 28' 17.46"	W 103° 17' 59.37"	30-Apr-93	3,570	106
CP 00490 EXP	0	U. R. Cattle Company	STK	--	21 S	36 E	19 2 3	N 32° 27' 51.41"	W 103° 18' 14.75"	--	3,650	--
CP 00664	3	Dove Broadcasting, Inc.	SAN	Shallow	21 S	36 E	23 2	N 32° 27' 51.27"	W 103° 14' 07.98"	25-May-84	3,537	150
CP 00882	3	Laymond Smith	DOM	--	21 S	36 E	23 2	N 32° 27' 51.27"	W 103° 14' 07.98"	--	3,537	--
CP 00484 (E)	3	Northern Natural Gas	SAN	Shallow	21 S	36 E	25 4 2	N 32° 26' 45.99"	W 103° 12' 51.03"	20-Jul-70	3,535	148
CP 00475 EXP	0	Ross Robinson	STK	--	21 S	36 E	30 4 2 2	N 32° 26' 46.01"	W 103° 17' 59.18"	--	3,620	--

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet)

Shaded well information indicates well location shown on Figure 2

^A = in acre feet per annum

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

DOM = Domestic

SAN = Sanitary

STK = Livestock Watering

COM = Commercial

EXP = Expired

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

TABLE 2

Summary of Excavation Analytical Results

Conoco Phillips- Lockhart B-28 Well #6 (Ref. #150009)

Soil Sample I.D.	Depth (feet)	Sample Date	Soil Status	PID Reading (ppm)	Field Chloride (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH (as gasoline) (mg/kg)	TPH (as diesel) (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
A (6")	0.5	18-Apr-05	In Situ	0.9	--	--	--	--	--	--	--	--	--	--
A (2')	2	18-Apr-05	In Situ	3.9	400	--	--	--	--	--	--	--	--	400
B (6")	0.5	18-Apr-05	In Situ	318	--	<0.005	<0.005	0.2890	1.27	1.56	442	3,350	3,790	96
B (2')	2	18-Apr-05	In Situ	1.9	--	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	41.5	41.5	480
C (6")	0.5	19-Apr-05	In Situ	1.2	--	--	--	--	--	--	--	--	--	--
C (2')	2	18-Apr-05	In Situ	1.0	440	--	--	--	--	--	--	--	--	336
D (6")	0.5	18-Apr-05	In Situ	10.2	--	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	24.3	24.3	240
D (2')	2	18-Apr-05	In Situ	1.3	--	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	<10.0	<20.0	384
E (6")	0.5	18-Apr-05	In Situ	5.1	--	--	--	--	--	--	--	--	--	--
E (2')	2	18-Apr-05	In Situ	4.9	--	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	<10.0	<20.0	560
F (6")	0.5	18-Apr-05	In Situ	0.0	--	--	--	--	--	--	--	--	--	--
F (2')	2	18-Apr-05	In Situ	0.0	--	--	--	--	--	--	--	--	--	--
NMOCD Remedial Thresholds				100		10				50			5,000	250 ^A

Bolded values are in excess of NMOCD Remediation Thresholds

-- =Not Analyzed

^AChloride residuals may not be capable of impacting local groundwater above the NMWQCC standards of 250 mg/L



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
ENVIRONMENTAL PLUS, INC.

ATTN: IAIN OLNESS

P.O. BOX 1558

EUNICE, NM 88231

FAX TO: (505) 394-2601

Receiving Date: 04/18/05

Reporting Date: 04/23/05

Project Owner: CONOCO PHILLIPS

Project Name: MEYER B-4 324

Project Location: 150009LOCKHART B-28 WELL #6

Sampling Date: 04/18/05

Sample Type: SOIL

Sample Condition: COOL & INTACT

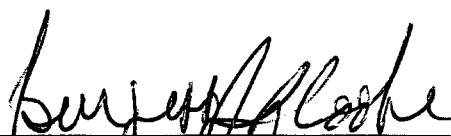
Sample Received By: BC

Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
------------	-----------	--	--	--------------------	--------------------	-----------------------------	-----------------------------

ANALYSIS DATE:		04/19/05	04/19/05	04/21/05	04/21/05	04/21/05	04/21/05
H9722-2	B(6")	442	3350	<0.005	<0.005	0.289	1.27
H9722-3	B(2')	<10.0	41.5	<0.005	<0.005	<0.005	<0.015
H9723-5	D(6")	<10.0	24.3	<0.005	<0.005	<0.005	<0.015
H9723-6	D(2')	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H9723-7	E(2')	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
Quality Control		772	805	0.093	0.095	0.092	0.275
True Value QC		800	800	0.100	0.100	0.100	0.300
% Recovery		96.5	101	92.6	95.2	91.6	91.8
Relative Percent Difference		3.9	2.6	2.1	8.0	3.0	8.1

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8260.


Burgess J. A. Cooke, Ph. D.


Date

H9722A.XLS

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
ENVIRONMENTAL PLUS, INC.

ATTN: IAIN OLNESS

P.O. BOX 1558

EUNICE, NM 88231

FAX TO: (505) 394-2601

Receiving Date: 04/18/05

Reporting Date: 04/19/05

Project Owner: CONOCO PHILLIPS

Project Name: MEYER B-4 324

Project Location: 150009LOCKHART B-28 WELL #6

Analysis Date: 04/19/05

Sampling Date: 04/18/05

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: BC

Analyzed By: AH

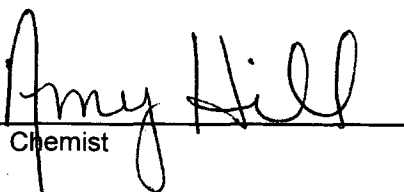
LAB NUMBER	SAMPLE ID	Cl ⁻ (mg/Kg)
H9722-1*	A (2')	400
H9722-2	B (6")	96
H9722-3*	B (2')	480
H9722-4	C (2')	336
H9722-5*	D (6")	240
H9722-6	D (2')	384
H9722-7*	E (2')	560
Quality Control		998
True Value QC		1000
% Recovery		99.8
Relative Percent Difference		2.2

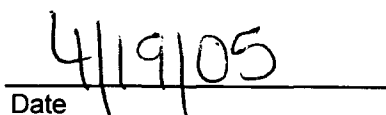
METHOD: Standard Methods

4500-Cl⁻B

Note: Analyses performed on 1:4 w:v aqueous extracts.

*Matrix interference (color) observed.


Chemist


Date

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. ~~19722~~ Cardinal shall be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

Cardinal Laboratories

101 East Marland, Hobbs, NM 88240
505-393-2326 Fax 505-393-2476

2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

Company Name Environmental Plus, Inc.		Bill To		ANALYSIS REQUEST											
EPI Project Manager Iain Olness															
Billing Address P.O. BOX 1558															
City, State, Zip Eunice New Mexico 88231															
EPI Phone#/Fax# 505-394-3481 / 505-394-2601															
Client Company ConocoPhillips															
Facility Name Meyer B-4 324															
Project Reference 15009Lockhart B-28 Well #6															
EPI Sampler Name Felix Hernandez															

ConocoPhillips

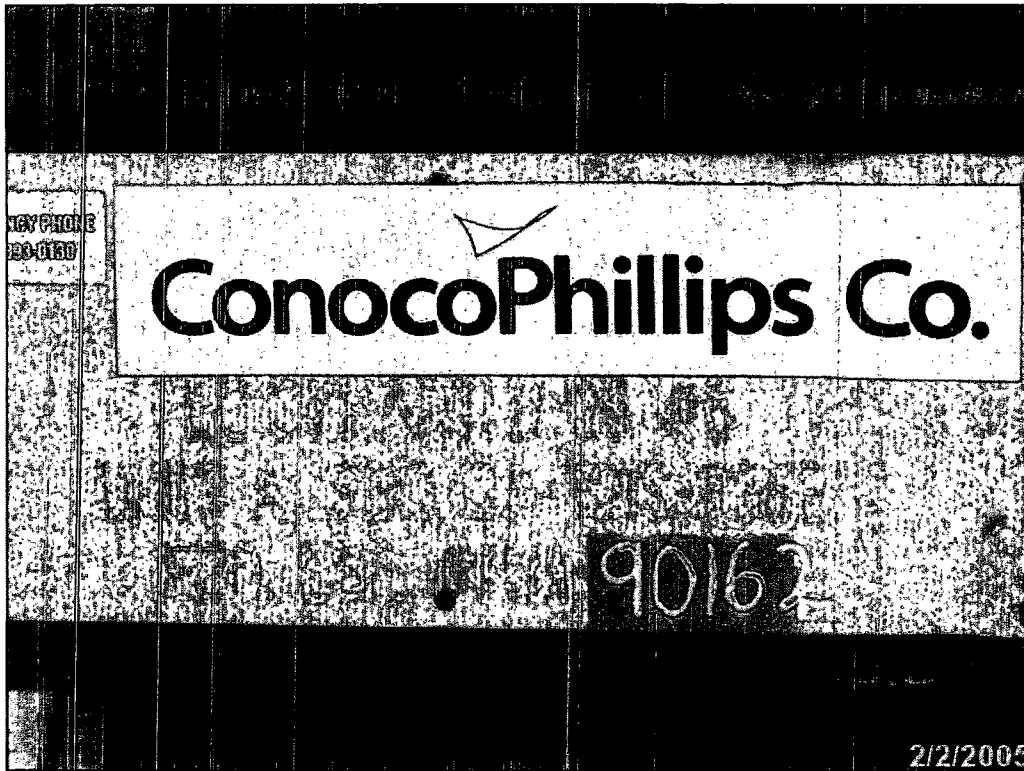
ATTN: John Abney
1410 West County Road
Hobbs, NM 88240

LAB I.D.	SAMPLE I.D.	MATRIX				PRESERV.			SAMPLING		ANALYSIS REQUEST									
		GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER	DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO ₄)	PH	TCLP	OTHER >>>	
49722-1	1 A (2')			X							18-Apr	8:06			X					
-2	2 B (6')			X							18-Apr	8:30	X	X	X					
-3	3 B (2')			X							18-Apr	8:35	X	X	X					
-4	4 C (2')			X							18-Apr	8:50	X	X	X					
-5	5 D (6')			X							18-Apr	9:15	X	X	X					
-6	6 D (2')			X							18-Apr	9:20	X	X	X					
-7	7 E (2')			X							18-Apr	9:35	X	X	X					
8																				
9																				
10																				

Sampler Requisitioned: <i>Felix Hernandez</i>		Received By:	
Date 4/8/05	Time 11:00		
Requisitioned by:		Received By: (lab staff) <i>Bunney</i>	
Delivered by:		Sample Conf & Intact (Yes) <input checked="" type="checkbox"/> No <input type="checkbox"/>	
		Checked By:	

Fax Results To Iain Olness 505-394-2601

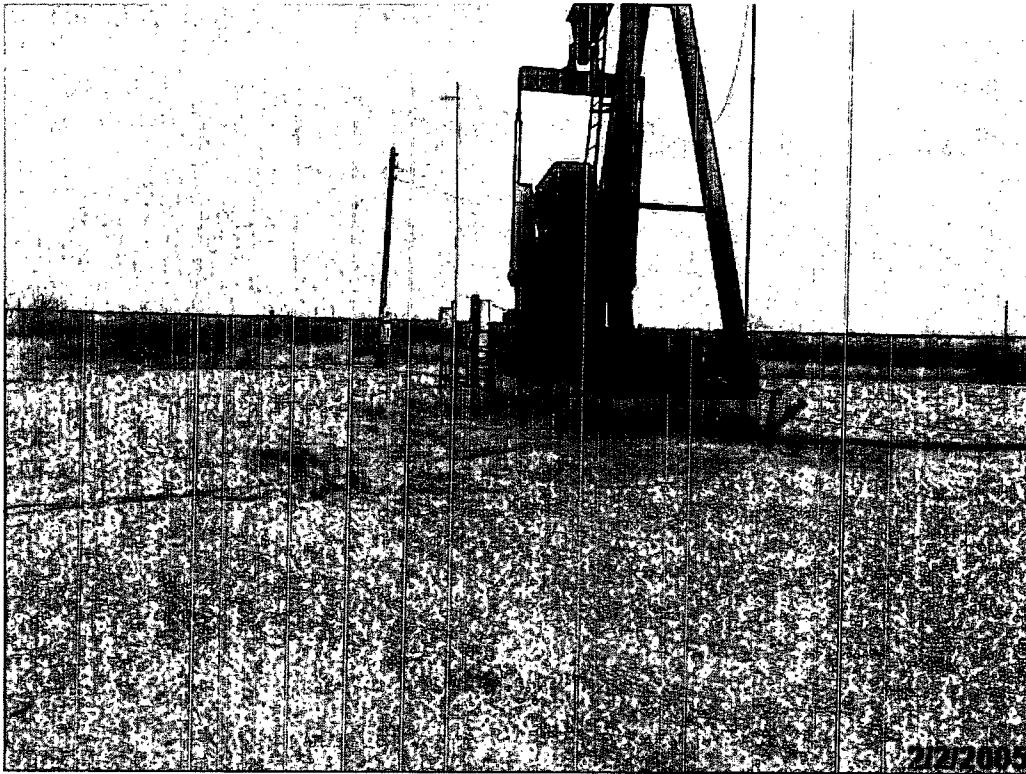
REMARKS:



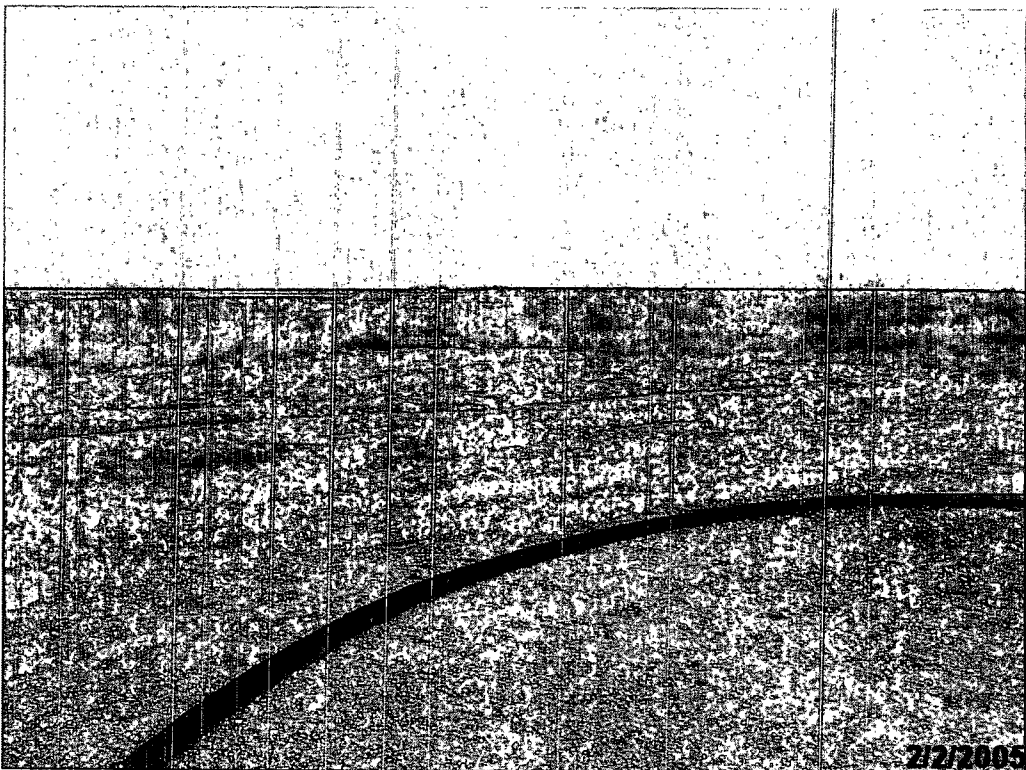
Photograph #1 – Lease sign.



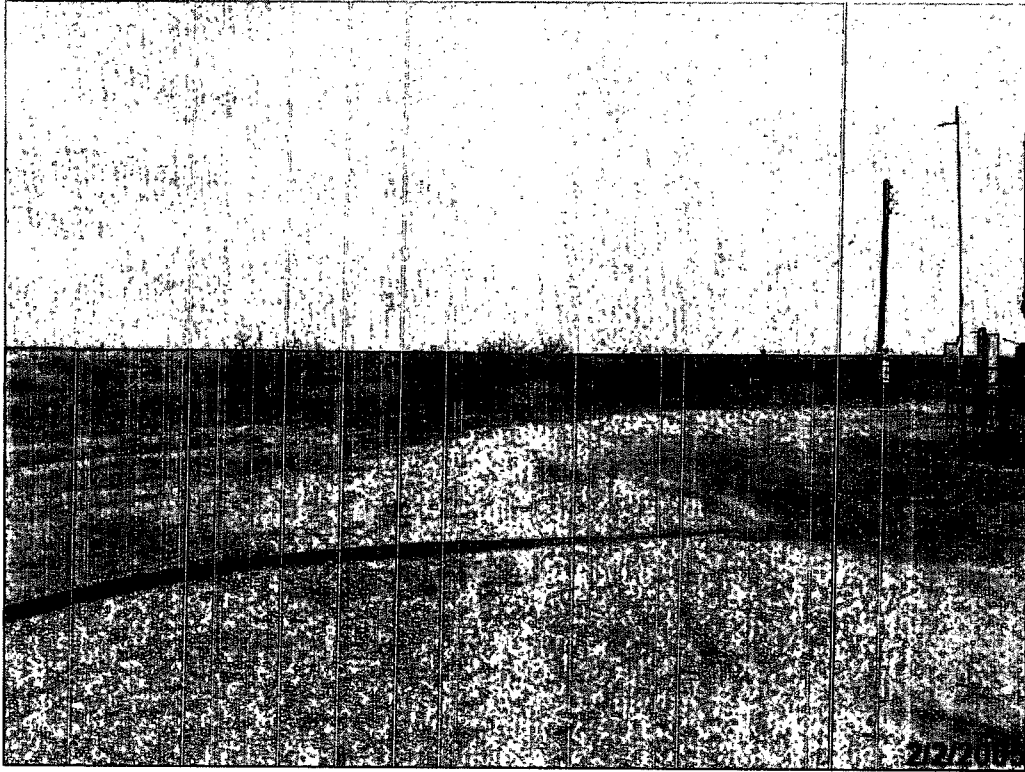
Photograph #2 – Looking down on point of release.



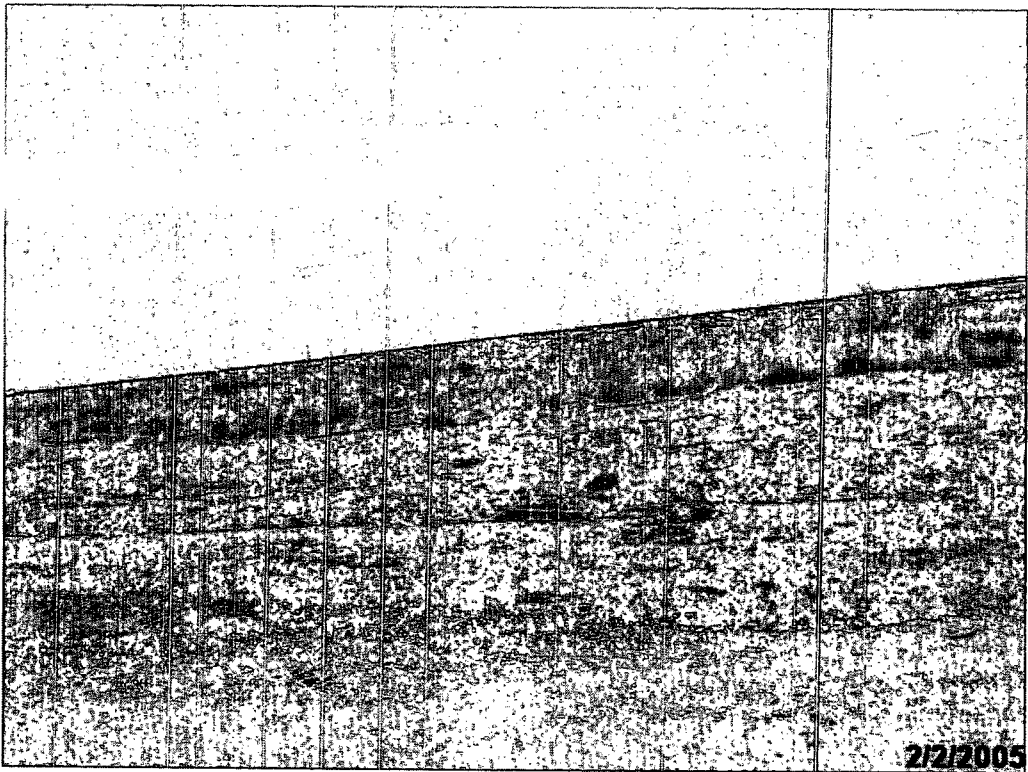
Photograph #3 – Point of release looking easterly.



Photograph #4 – Release area looking northerly.



Photograph #5 – Release area looking northeasterly.



Photograph #6 – Release area looking northerly.

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	Contact	John Abney
Address	1410 N. West County Rd. Hobbs NM. 88240	Telephone No.	(505)391-3128
Facility Name	Lockhart B - 28 Well #6	Facility Type	Oil Well

Surface Owner	BLM	Mineral Owner	BLM	Lease No.	NM-90162
---------------	-----	---------------	-----	-----------	----------

LOCATION OF RELEASE

API# 30025048140000

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	28	21S	36E	1650	South	1650	East	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Oil and Produced water	Volume of Release	22 bbls	Volume Recovered	15 bbls
Source of Release	Flowline	Date and Hour of Occurrence	7/17/04	Date and Hour of Discovery	7/17/04 8a
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	NA		
By Whom?	NA	Date and Hour	NA		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	NA		


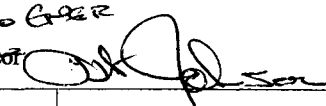
If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
Flowline ruptured due to extremely low night time temperatures.

Describe Area Affected and Cleanup Action Taken.*

Area affected was 30' X 72' of well pad and 100' X 12' area of pasture land. A vacuum truck was called to pickup the free liquids. We recovered 2 bbl of oil and 13 bbls of water. A backhoe was used to back drag the well pad and spread sand over the contaminated area of pasture due to cattle in the area. The site will be delineated to determine the necessary remediation action.

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 Abney	Approved by District Supervisor 	
Title: SHEAR Specialist	Approval Date: 6.13.06	Expiration Date:
E-mail Address: John.H.Abney@conocophillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 01/31/2005	Phone: (505)391-3128	

* Attach Additional Sheets If Necessary