ENVIRONMENTAL PLUS, INC. Micro-Blaze Micro-Blaze Out™
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

RP# 1342

2 June 2005

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

RE: ConocoPhillips SEMU Permian Well 73 Release Site (Ref. #150008)
UL-B (NW¼ of the NE ¼) of Section 19, T20S, R38E
Latitude N 32° 33' 33.8" and Longitude W 103° 11' 20.7" API#30025078220000

Dear Mr. Johnson:

On November 24, 2004, a release of approximately 35 barrels of production fluid occurred as a result of a flow line leak at the above-referenced site. ConocoPhillips recovered approximately 28 barrels of production fluid and utilized a backhoe to back drag the release area to eliminate free-liquid residuals. ConocoPhillips retained Environmental Plus, Inc. (EPI) in January 2005 to delineate the vertical 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 NW¼ of the NE¼ of Section 19, Township 20 South, Range 38 East at an elevation of approximately 3,543 feet above mean sea level (reference *Figures 1 and 2*). The property is owned by Bob McCasland. A search for area 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). A total of 18 wells were found to be located either in Section 19 or one of the eight adjacent sections (i.e., sections 17, 18, 20, 29 and 23 of Township 20 South, Range 38 East and sections 13, 24 and 25 of Township 20 South, Range 37 East). The average depth to water in these wells was reported to be approximately 72 feet below ground surface (bgs) and ranged from 50 feet bgs to 82.73 feet bgs. (reference *Table 2*). No water supply wells or bodies of surface water were found to be located within a 1,000-foot radius of the release location, although one well (USGS #1) is located near the 1,000-foot boundary (reference *Figure 2*). Based on available information it was determined that the distance between the contamination and groundwater was between 50 and100 feet. Utilizing this information, it was determined that 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	1,000 parts per million

Incident - nPAC0714434227
Application - pPAC0714434336

RP# 1342

ENVIRONMENTAL PLUS, INC.

P.O. BOX 1558 ••• 2100 AVENUE O ••• EUNICE, NEW MEXICO 88231
TELEPHONE 505•394•3481 ••• FAX 505•394•2601

Field Work

EPI was on site from February 3, 2005 to advance two soil borings within the perimeter of the release area to delineate the vertical extent of production fluid-impacted soil (reference *Figure 4*). During the advancement of the soil boring, samples were collected at 5-foot intervals with a portion of the sample being placed in a laboratory provided container and the remainder placed in a self sealing polyethylene bag. The samples placed in laboratory provided containers were immediately placed on ice for transport to Environmental Lab of Texas of Odessa, Texas, for quantification of benzene, toluene, ethylbenzene and total xylenes (BTEX), gasoline range organics (GRO), diesel range organics (DRO) and chloride.

The portion of the samples placed in the self-sealing polyethylene bag were placed in a heated environment (i.e., cab of a truck) to allow the volatilization of organic vapors. After the samples had been allowed to equilibrate to ≈70° F, they were analyzed for the presence of organic vapors utilizing a MiniRae® photoionozation detector (PID) equipped with a 9.8 electron-volt (eV) lamp. In addition, the samples were analyzed in the field for the presence of chloride using a LaMotte Chloride Test Kit.

The soil borings were advanced to depths of 10 and 15 feet below ground surface (bgs) and samples were collected at 2-feet, 5-feet, 10-feet, and 15-feet bgs. Field analyses of the samples collected during the advancement of soil boring BH-1 indicated the presence of organic vapors at concentrations ranging from 17.4 parts per million (ppm) at 15 feet bgs to 104 ppm at 2 feet bgs (reference *Table 1*). Field analyses for chloride indicated concentrations ranging from 240 milligrams per kilogram (mg/Kg) at 2 and 15 feet bgs to 1,840 mg/Kg at 5 feet bgs. Field analyses of samples collected during the advancement of soil boring BH-2 indicated the presence of organic vapors at concentrations ranging from 7.2 ppm at 10 feet bgs to 28.4 ppm at 2 feet bgs. Field analyses for chlorides indicated concentrations ranging from 240 mg/Kg at 2 and 10 feet bgs to 480 mg/Kg at 5 feet bgs.

During the advancement of the soil boring, the lithology was defined as sand to a depth of at least 15 feet bgs (reference *Attachment II*).

Analytical Data

Analytical results for the samples collected during the advancement of soil boring BH-1 indicated soil impacted above the NMOCD remedial threshold extends to a depth of between 2 and 5-feet bgs (reference *Table* 1). Analytical results for the samples collected during the advancement of soil boring BH-2 indicated there was no soil impacted above the NMOCD remedial thresholds. The only contaminant reported above the NMOCD remedial threshold for this site was total petroleum hydrocarbons (TPH) in the sample obtained from soil boring BH-1 at a depth of 2-feet bgs. TPH concentrations were reported at 20,500 milligrams per kilogram (mg/Kg) in this sample. Benzene and BTEX concentrations were reported at concentrations below the NMOCD remedial guidelines for all samples.

Chloride concentrations for the samples obtained during the advancement of soil boring BH-1 were reported ranging from 20.5 milligrams per liter (mg/L) at 2-feet bgs to 1,810 mg/L at 5 feet bgs. The reported concentrations are below the New Mexico Water Quality Control Commission's (NMWQCC) chloride standards for groundwater of 250 mg/L for all samples; with the exception of the sample collected at 5-feet bgs (reference *Table 2*).

Chloride concentrations for the samples obtained during the advancement of soil boring BH-2 were reported ranging from 22.2 mg/L at 2-feet bgs to 325 mg/L at 5-feet bgs. The reported concentrations are below the NMWQCC chloride standards for groundwater of 250 mg/L for all samples, with the exception of the sample collected at 5-feet bgs (reference *Table 2*).

Conclusions

Based on field and analytical analyses, soil impacted above the NMOCD remedial thresholds extends to a depth of approximately 5-feet bgs in the vicinity of where soil boring BH-1 was advanced (reference *Figure 4*). The release area is approximately 1,370 square feet in size; however, the lateral extent of impacts above the NMOCD remedial thresholds is limited to the vicinity of where soil boring BH-1 was advanced. The volume of soil that is required to be treated is unknown; however, if the entire release area was excavated to a depth of 5-feet bgs, the volume of soil excavated would be approximately 250 cubic yards (*in situ*). Due to the fact that impacts above the NMOCD remedial thresholds are limited to the vicinity of where soil boring BH-1 was advanced, the volume of impacted soil is actually less than 250 cubic yards.

Chloride concentrations were reported below the NMWQCC standards for groundwater in all but two samples collected during the advancement of the soil borings. The samples exhibiting elevated chloride levels were collected at 5-feet bgs in each of the soil borings and concentrations ranged from 325 mg/Kg (BH-2) to 1,810 mg/Kg (BH-1). Due to the elevated chloride levels reported in the sample collected from soil boring BH-1 at 5-feet bgs and the depth to groundwater in the area, there is the possibility that groundwater could be impacted by chloride.

Recommendations

Based on field and analytical results, it is recommended that soil impacted above the remedial limits within the vicinity of soil boring BH-1 be excavated. The final lateral and vertical extents will be determined via field analyses of soil samples collected during excavation activities. Upon completion of excavation activities, the excavation basin will be sampled (i.e., grab samples collected from the sidewalls and floor) and the samples submitted to an independent laboratory for quantification of BTEX and TPH.

The excavated soil impacted above the NMOCD remedial thresholds can be treated either by (a) transporting it to a State approved land treatment facility and backfilling the excavation with clean soil obtained off-site or (b) blending the soil with clean soil obtained from along the right-of-way until NMOCD remedial goals are achieved. Samples would be collected from the blended soil and analyzed in the field to ascertain when NMOCD guidelines had been achieved and samples submitted to an independent laboratory to verify field analyzes. Upon receipt of analytical results verifying the blending of the soil to NMOCD remedial guidelines or below, the excavation should be backfilled, contoured to allow natural drainage and reseeded.

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
ConocoPhillips
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: John Abney, ConocoPhillips – Hobbs
C. John Coy, ConocoPhillips – Hobbs
Bob McCasland, Property Owner
File

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

FIGURES

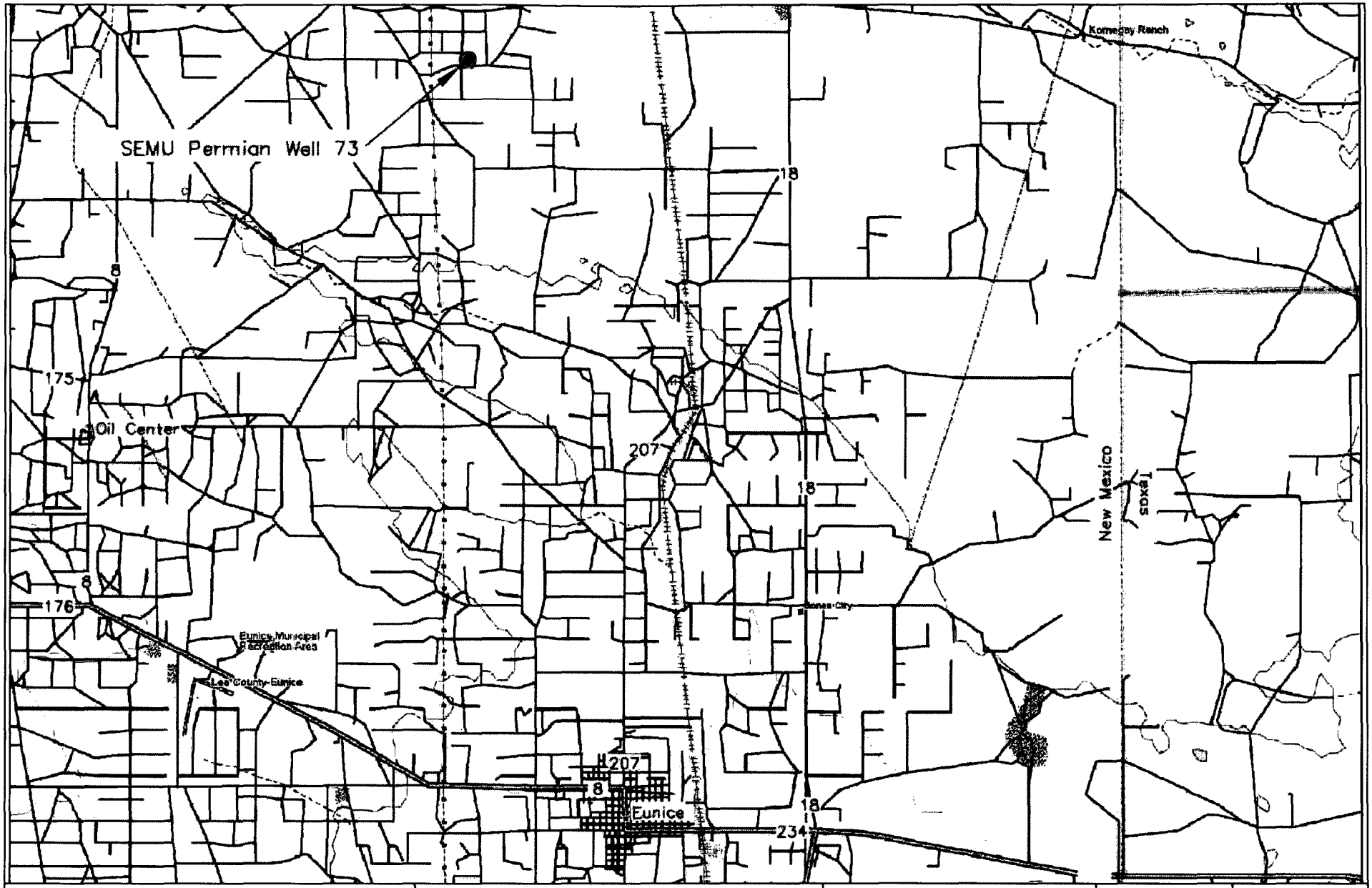

Figure 1 Area Map ConocoPhillips SEMU Permian Well 73	Lea County, New Mexico NW 1/4 of the NE 1/4, Sec. 19, T20S, R38E N 32° 33' 33.8" W 103° 11' 20.7" Elevation: 3,543 feet amsl	DWG By: Iain Olness March 2005 0 1.5 3.0 Miles	REVISED: SHEET 1 of 1 N

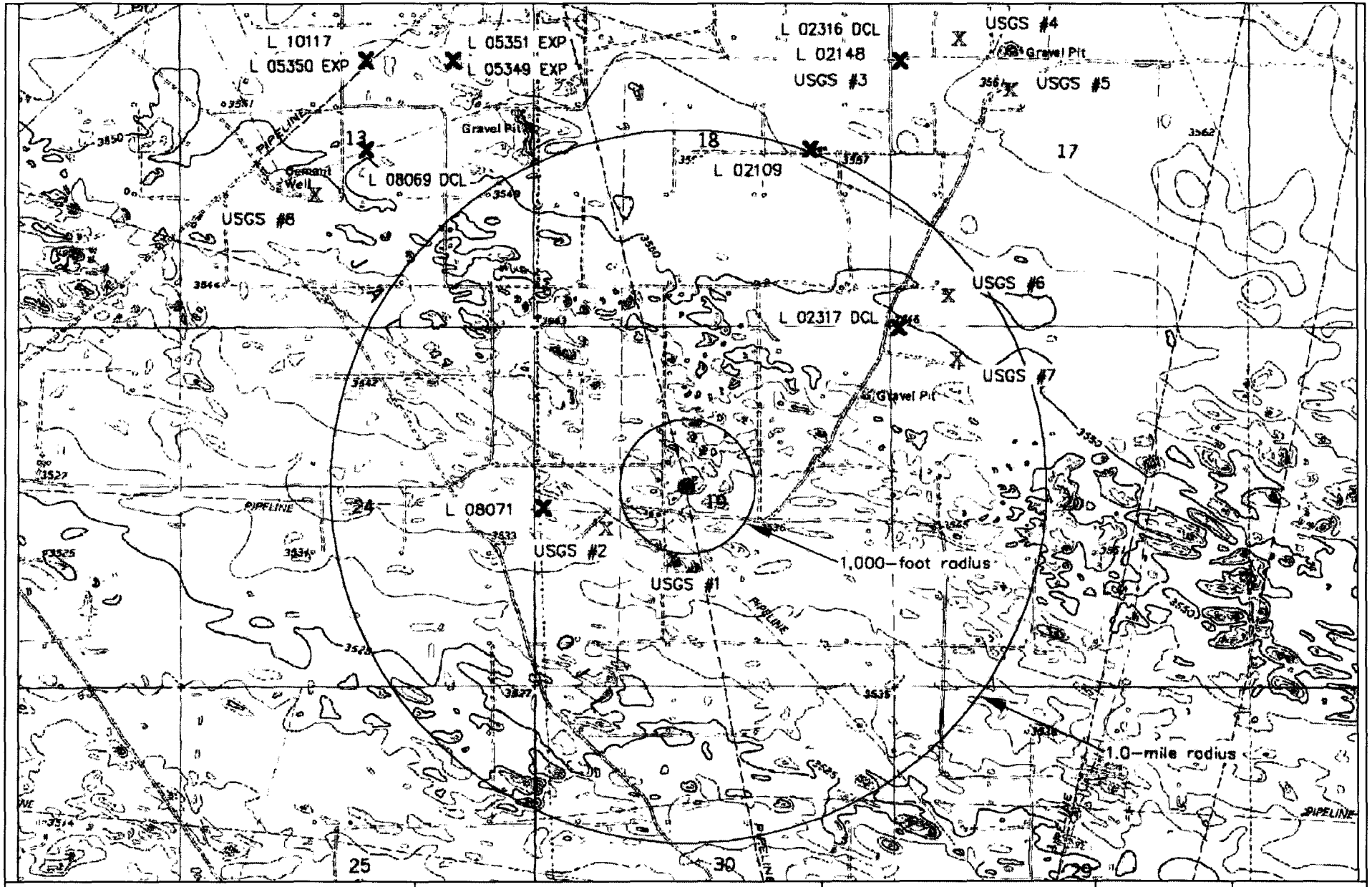

Figure 2 Site and Well Location Map ConocoPhillips SEMU Permian Well 73	Lea County, New Mexico NW 1/4 of the NE 1/4, Sec. 19, T20S, R38E N 32° 33' 33.8" W 103° 11' 20.7" Elevation: 3,543 feet amsl	DWG By: Iain Olness March 2005 0 2,000 4,000 Feet	REVISED: SHEET 1 of 1

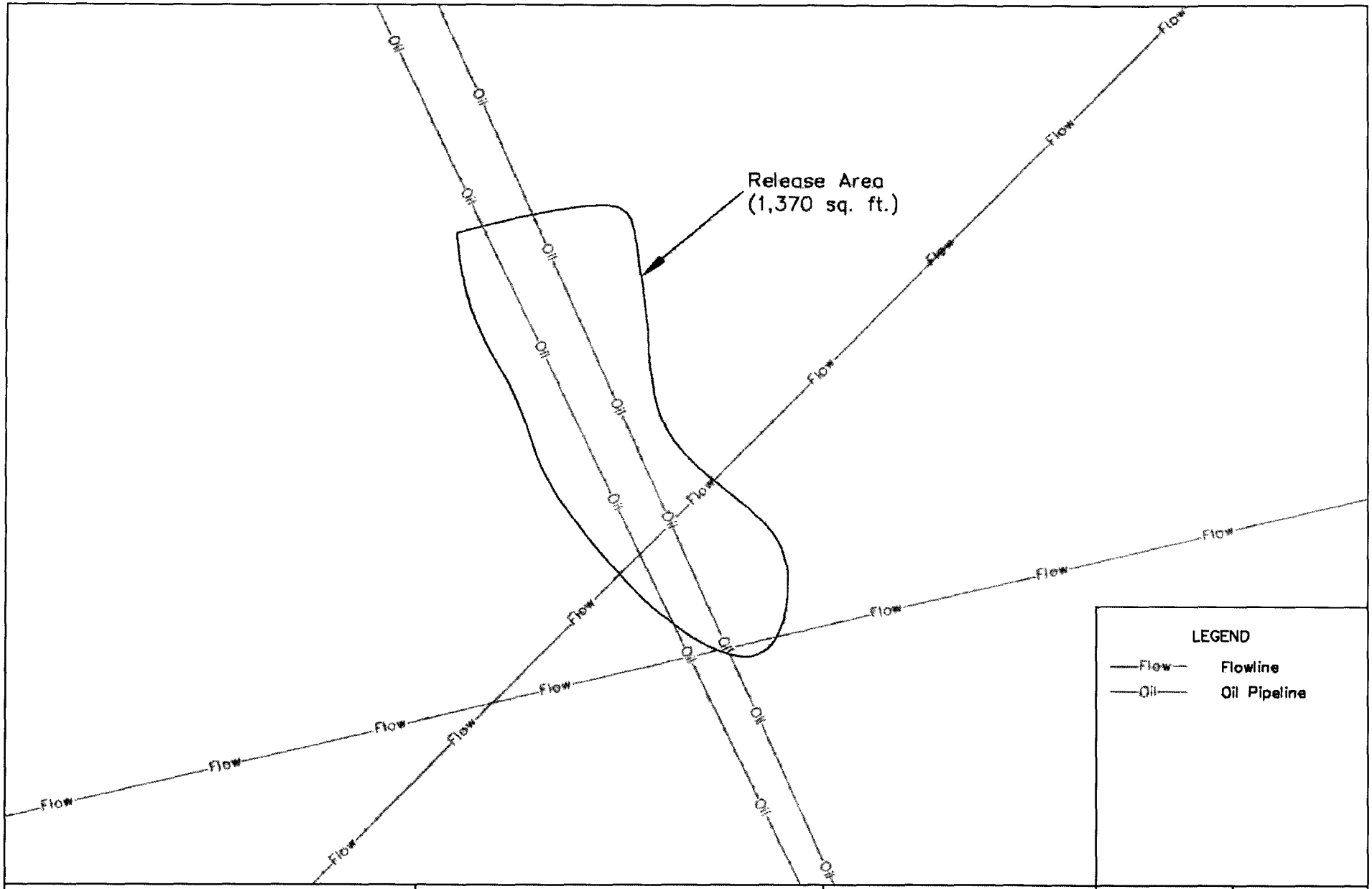

Figure 3 Site Map ConocoPhillips SEMU Permian Well 73	Lea County, New Mexico NW 1/4 of the NE 1/4, Sec. 19, T20S, R38E N 32° 33' 33.8" W 103° 11' 20.7" Elevation: 3,543 feet amsl	DWG By: Iain Olness March 2005 0 20 40 Feet	REVISED: SHEET 1 of 1	N

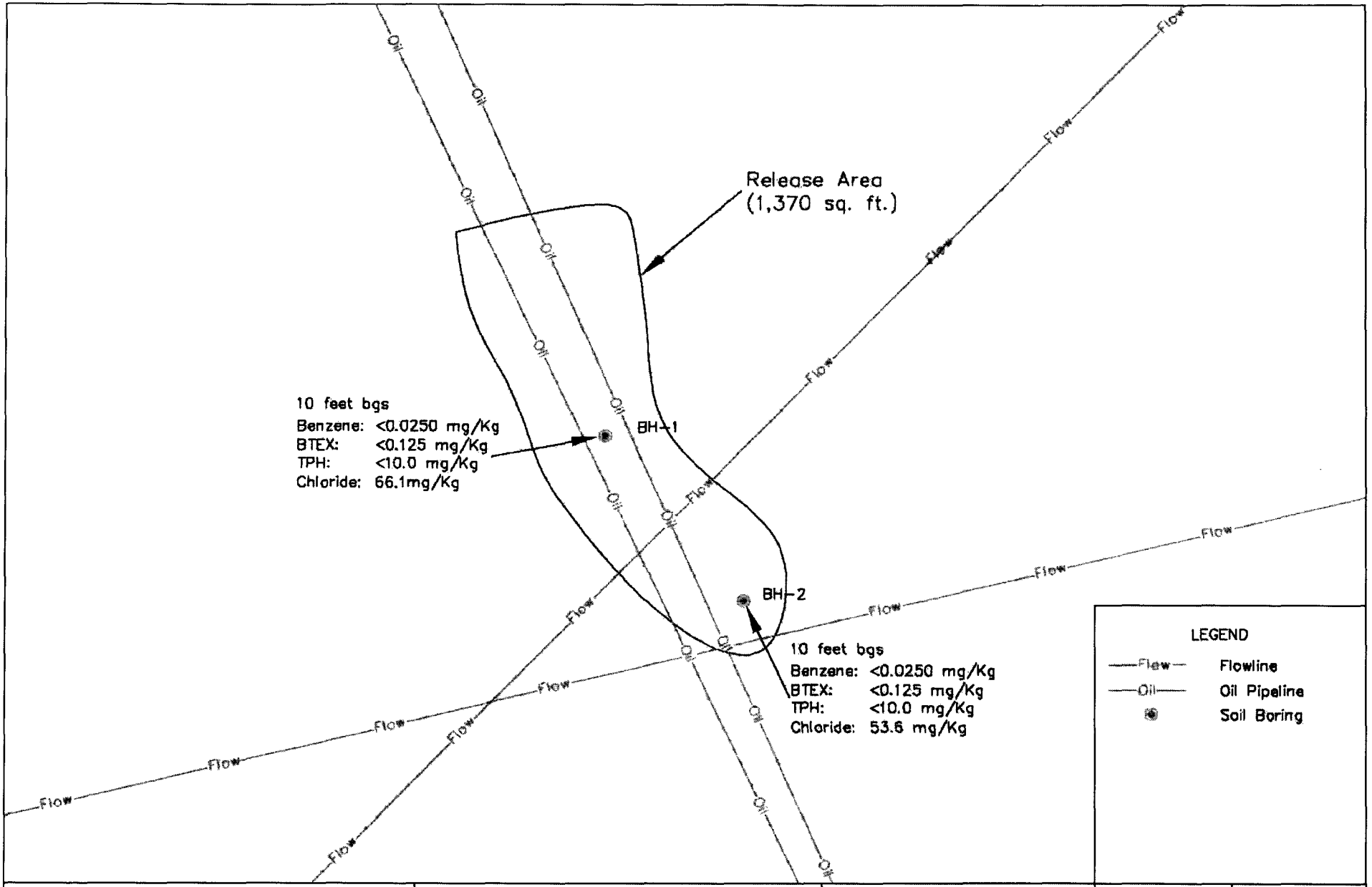

Figure 4 Soil Boring Location Map ConocoPhillips SEMU Permian Well 73	Lea County, New Mexico NW 1/4 of the NE 1/4, Sec. 19, T20S, R38E N 32° 33' 33.8" W 103° 11' 20.7" Elevation: 3,543 feet amsl	DWG By: Iain Olness March 2005	REVISED:	SHEET 1 of 1

TABLES

TABLE 1

Summary of Soil Boring Analytical Results

Conoco Phillips SEMU Permian Well 73 (Ref. #150008)

Soil Boring	Depth (feet)	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	m,p-Xylenes (mg/Kg)	o-Xylene (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
Background	Surface	03-Feb-05	NA	240	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH-1	2	03-Feb-05	104	240	0.0503	1.35	3.14	6.91	2.78	14.2	2,900	17,600	**20,500**	20.5
	5	03-Feb-05	74.4	1,840	<0.0250	0.0914	0.355	0.855	0.379	1.68	210	518	728	1,810
	10	03-Feb-05	21.1	320	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	<10.0	8.48[4]	<10.0	66.1
	15	03-Feb-05	17.4	240	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH-2	2	03-Feb-05	28.4	240	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	7.36[4]	154	154	22.2
	5	03-Feb-05	10.3	480	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	<10.0	<10.0	<10.0	325
	10	03-Feb-05	7.2	240	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	<10.0	<10.0	<10.0	53.6
NMOCD Remedial Thresholds			**100[3]**		**10**					**50**			**1,000**	**250[5]**

[1] *Bolded values are in excess of the NMOCD Remediation Thresholds*

[2] *NA = Not Analyzed*

[3] *In lieu of laboratory analyes of benzene, toluene, ethylbenzene and total xylenes.*

[4] *Detected, but below the reporting limit; therefore the result is an estimated concentration (CLP J-Flag)*

[5] *Chloride residuals may not be capable of impacting local groundwaterabove the NMWQCCstandard of 250 mg/L*

TABLE 2

Well Data

Conoco Phillips SEMU Permian Well 73 (Ref. #150008)

Well Number	Diversion[A]	Owner	Use	Source	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation[B]	Depth to Water (ft bgs)

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1)
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
STK = Livestock Watering
EXP = Expired
IRR = Irrigation
P = The site was being pumped
quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are biggest to smallest

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Iain Olness

Environmental Plus, Incorporated

P.O. Box 1558

Eunice, NM 88231

Project: Conoco Phillips/ SEMU Permian Well 73

Project Number: 150008

Location: None Given

Lab Order Number: 5B09012

Report Date: 02/18/05

ATTACHMENT I

LABORATORY RESULTS
AND
CHAIN-OF-CUSTODY FORM

Environmental Plus, Incorporated	Project: Conoco Phillips/ SEMU Permian Well 73	Fax: 505-394-2601
P.O. Box 1558	Project Number: 150008	**Reported:**
Eunice NM, 88231	Project Manager: Iain Olness	02/18/05 08:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH-1 (2')	5B09012-01	Soil	02/03/05 11:00	02/09/05 16:15
BH-1 (5')	5B09012-02	Soil	02/03/05 11:10	02/09/05 16:15
BH-1 (10')	5B09012-03	Soil	02/03/05 12:49	02/09/05 16:15
BH-2 (2')	5B09012-05	Soil	02/03/05 14:10	02/09/05 16:15
BH-2 (5')	5B09012-06	Soil	02/03/05 14:17	02/09/05 16:15
BH-2 (10')	5B09012-07	Soil	02/03/05 14:45	02/09/05 16:15

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (2') (5B09012-01) Soil									
Benzene	**0.0503**	0.0250	mg/kg dry	25	EB51409	02/10/05	02/14/05	EPA 8021B	
Toluene	**1.35**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**3.14**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**6.91**	0.0250	"	"	"	"	"	"	
Xylene (o)	**2.78**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*131 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*80.6 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**2900**	50.0	mg/kg dry	5	EB51006	02/10/05	02/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	**17600**	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**20500**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*24.8 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*20.2 %*	*70-130*		"	"	"	"	*S-06*
BH-1 (5') (5B09012-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EB51409	02/10/05	02/10/05	EPA 8021B	
Toluene	**0.0914**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.355**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.855**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.379**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**210**	10.0	mg/kg dry	1	EB51006	02/10/05	02/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	**518**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**728**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*93.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*84.0 %*	*70-130*		"	"	"	"	
BH-1 (10') (5B09012-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EB51409	02/10/05	02/10/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*109 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EB51006	02/10/05	02/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	**J [8.48]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (10') (5B09012-03) Soil									
Surrogate: 1-Chlorooctane		*92.2 %*	*70-130*		*EB51006*	*02/10/05*	*02/10/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*77.6 %*	*70-130*		"	"	"	"	
BH-2 (2') (5B09012-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EB51409	02/10/05	02/10/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**J [7.36]**	10.0	mg/kg dry	1	EB51006	02/10/05	02/10/05	EPA 8015M	J
Diesel Range Organics >C12-C35	**154**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**154**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*76.8 %*	*70-130*		"	"	"	"	
BH-2 (5') (5B09012-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EB51409	02/10/05	02/10/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.9 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EB51006	02/10/05	02/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*91.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*74.0 %*	*70-130*		"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-2 (10') (5B09012-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EB51409	02/10/05	02/10/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.1 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EB51006	02/10/05	02/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*92.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*73.6 %*	*70-130*		"	"	"	"	

Environmental Plus, Incorporated	Project: Conoco Phillips/ SEMU Permian Well 73	Fax: 505-394-2601
P.O. Box 1558	Project Number: 150008	**Reported:**
Eunice NM, 88231	Project Manager: Iain Olness	02/18/05 08:29

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (2') (5B09012-01) Soil									
Chloride	**20.5**	5.00	mg/kg	10	EB51717	02/14/05	02/14/05	EPA 300.0	
% Moisture	**1.4**	0.1	%	1	EB51102	02/10/05	02/11/05	% calculation	
BH-1 (5') (5B09012-02) Soil									
Chloride	**1810**	50.0	mg/kg	100	EB51717	02/14/05	02/14/05	EPA 300.0	
% Moisture	**10.1**	0.1	%	1	EB51102	02/10/05	02/11/05	% calculation	
BH-1 (10') (5B09012-03) Soil									
Chloride	**66.1**	5.00	mg/kg	10	EB51717	02/14/05	02/14/05	EPA 300.0	
% Moisture	**6.1**	0.1	%	1	EB51102	02/10/05	02/11/05	% calculation	
BH-2 (2') (5B09012-05) Soil									
Chloride	**22.2**	5.00	mg/kg	10	EB51717	02/14/05	02/14/05	EPA 300.0	
% Moisture	**2.8**	0.1	%	1	EB51102	02/10/05	02/11/05	% calculation	
BH-2 (5') (5B09012-06) Soil									
Chloride	**325**	10.0	mg/kg	20	EB51717	02/14/05	02/14/05	EPA 300.0	
% Moisture	**4.6**	0.1	%	1	EB51102	02/10/05	02/11/05	% calculation	
BH-2 (10') (5B09012-07) Soil									
Chloride	**53.6**	20.0	mg/kg	40	EB51717	02/14/05	02/14/05	EPA 300.0	
% Moisture	**6.8**	0.1	%	1	EB51102	02/10/05	02/11/05	% calculation	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB51006 - Solvent Extraction (GC)										
Blank (EB51006-BLK1)				Prepared & Analyzed: 02/10/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*47.5*		*mg/kg*	*50.0*		*95.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.4*		*"*	*50.0*		*74.8*	*70-130*			
Blank (EB51006-BLK2)				Prepared: 02/10/05 Analyzed: 02/11/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*47.6*		*mg/kg*	*50.0*		*95.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.2*		*"*	*50.0*		*70.4*	*70-130*			
LCS (EB51006-BS1)				Prepared & Analyzed: 02/10/05						
Gasoline Range Organics C6-C12	429	10.0	mg/kg wet	500		85.8	75-125			
Diesel Range Organics >C12-C35	442	10.0	"	500		88.4	75-125			
Total Hydrocarbon C6-C35	871	10.0	"	1000		87.1	75-125			
Surrogate: 1-Chlorooctane	*43.1*		*mg/kg*	*50.0*		*86.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.5*		*"*	*50.0*		*77.0*	*70-130*			
LCS (EB51006-BS2)				Prepared: 02/10/05 Analyzed: 02/11/05						
Gasoline Range Organics C6-C12	445	10.0	mg/kg wet	500		89.0	75-125			
Diesel Range Organics >C12-C35	459	10.0	"	500		91.8	75-125			
Total Hydrocarbon C6-C35	904	10.0	"	1000		90.4	75-125			
Surrogate: 1-Chlorooctane	*39.3*		*mg/kg*	*50.0*		*78.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.9*		*"*	*50.0*		*71.8*	*70-130*			
Calibration Check (EB51006-CCV1)				Prepared & Analyzed: 02/10/05						
Gasoline Range Organics C6-C12	489		mg/kg	500		97.8	80-120			
Diesel Range Organics >C12-C35	494		"	500		98.8	80-120			
Total Hydrocarbon C6-C35	983		"	1000		98.3	80-120			
Surrogate: 1-Chlorooctane	*49.3*		*"*	*50.0*		*98.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.3*		*"*	*50.0*		*76.6*	*70-130*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB51006 - Solvent Extraction (GC)										
Calibration Check (EB51006-CCV2)				Prepared: 02/10/05 Analyzed: 02/11/05						
Gasoline Range Organics C6-C12	490		mg/kg	500		98.0	80-120			
Diesel Range Organics >C12-C35	506		"	500		101	80-120			
Total Hydrocarbon C6-C35	996		"	1000		99.6	80-120			
Surrogate: 1-Chlorooctane	*41.2*		*"*	*50.0*		*82.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.7*		*"*	*50.0*		*75.4*	*70-130*			
Matrix Spike (EB51006-MS1)		**Source: 5B09014-01**		Prepared & Analyzed: 02/10/05						
Gasoline Range Organics C6-C12	558	10.0	mg/kg dry	574	ND	97.2	75-125			
Diesel Range Organics >C12-C35	614	10.0	"	574	ND	107	75-125			
Total Hydrocarbon C6-C35	1170	10.0	"	1150	ND	102	75-125			
Surrogate: 1-Chlorooctane	*51.6*		*mg/kg*	*50.0*		*103*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.5*		*"*	*50.0*		*79.0*	*70-130*			
Matrix Spike (EB51006-MS2)		**Source: 5B09015-04**		Prepared: 02/10/05 Analyzed: 02/11/05						
Gasoline Range Organics C6-C12	491	10.0	mg/kg dry	531	ND	92.5	75-125			
Diesel Range Organics >C12-C35	560	10.0	"	531	ND	105	75-125			
Total Hydrocarbon C6-C35	1050	10.0	"	1060	ND	99.1	75-125			
Surrogate: 1-Chlorooctane	*49.1*		*mg/kg*	*50.0*		*98.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.7*		*"*	*50.0*		*79.4*	*70-130*			
Matrix Spike Dup (EB51006-MSD1)		**Source: 5B09014-01**		Prepared & Analyzed: 02/10/05						
Gasoline Range Organics C6-C12	527	10.0	mg/kg dry	574	ND	91.8	75-125	5.71	20	
Diesel Range Organics >C12-C35	604	10.0	"	574	ND	105	75-125	1.64	20	
Total Hydrocarbon C6-C35	1130	10.0	"	1150	ND	98.3	75-125	3.48	20	
Surrogate: 1-Chlorooctane	*48.5*		*mg/kg*	*50.0*		*97.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.4*		*"*	*50.0*		*72.8*	*70-130*			
Matrix Spike Dup (EB51006-MSD2)		**Source: 5B09015-04**		Prepared: 02/10/05 Analyzed: 02/11/05						
Gasoline Range Organics C6-C12	516	10.0	mg/kg dry	531	ND	97.2	75-125	4.97	20	
Diesel Range Organics >C12-C35	546	10.0	"	531	ND	103	75-125	2.53	20	
Total Hydrocarbon C6-C35	1060	10.0	"	1060	ND	100	75-125	0.948	20	
Surrogate: 1-Chlorooctane	*49.9*		*mg/kg*	*50.0*		*99.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.0*		*"*	*50.0*		*76.0*	*70-130*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB51409 - EPA 5030C (GC)										
Blank (EB51409-BLK1)				Prepared & Analyzed: 02/10/05						
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*94.0*		*ug/kg*	*100*		*94.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*108*		*"*	*100*		*108*	*80-120*			
LCS (EB51409-BS1)				Prepared & Analyzed: 02/10/05						
Benzene	100		ug/kg	100		100	80-120			
Toluene	103		"	100		103	80-120			
Ethylbenzene	117		"	100		117	80-120			
Xylene (p/m)	238		"	200		119	80-120			
Xylene (o)	113		"	100		113	80-120			
Surrogate: a,a,a-Trifluorotoluene	*117*		*"*	*100*		*117*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*120*		*"*	*100*		*120*	*80-120*			
Calibration Check (EB51409-CCV1)				Prepared: 02/10/05 Analyzed: 02/11/05						
Benzene	102		ug/kg	100		102	80-120			
Toluene	97.6		"	100		97.6	80-120			
Ethylbenzene	99.1		"	100		99.1	80-120			
Xylene (p/m)	214		"	200		107	80-120			
Xylene (o)	106		"	100		106	80-120			
Surrogate: a,a,a-Trifluorotoluene	*118*		*"*	*100*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*103*		*"*	*100*		*103*	*80-120*			
Matrix Spike (EB51409-MS1)	**Source: 5B10010-01**			Prepared & Analyzed: 02/10/05						
Benzene	100		ug/kg	100	ND	100	80-120			
Toluene	98.9		"	100	ND	98.9	80-120			
Ethylbenzene	105		"	100	ND	105	80-120			
Xylene (p/m)	227		"	200	ND	114	80-120			
Xylene (o)	111		"	100	ND	111	80-120			
Surrogate: a,a,a-Trifluorotoluene	*116*		*"*	*100*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*111*		*"*	*100*		*111*	*80-120*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB51409 - EPA 5030C (GC)										
Matrix Spike Dup (EB51409-MSD1)	**Source: 5B10010-01**			Prepared: 02/10/05 Analyzed: 02/11/05						
Benzene	91.0		ug/kg	100	ND	91.0	80-120	9.42	20	
Toluene	87.3		"	100	ND	87.3	80-120	12.5	20	
Ethylbenzene	91.4		"	100	ND	91.4	80-120	13.8	20	
Xylene (p/m)	200		"	200	ND	100	80-120	13.1	20	
Xylene (o)	100		"	100	ND	100	80-120	10.4	20	
Surrogate: a,a,a-Trifluorotoluene	*107*		"	*100*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*117*		"	*100*		*117*	*80-120*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB51102 - General Preparation (Prep)										
Blank (EB51102-BLK1)				Prepared: 02/10/05 Analyzed: 02/11/05						
% Moisture	ND	0.1	%							
Duplicate (EB51102-DUP1)		**Source: 5B09012-01**		Prepared: 02/10/05 Analyzed: 02/11/05						
% Moisture	1.5	0.1	%		1.4			6.90	20	
Batch EB51717 - Water Extraction										
Blank (EB51717-BLK1)				Prepared & Analyzed: 02/14/05						
Chloride	ND	0.500	mg/kg							
LCS (EB51717-BS1)				Prepared & Analyzed: 02/14/05						
Chloride	9.45		mg/L	10.0		94.5	80-120			
LCS Dup (EB51717-BSD1)				Prepared & Analyzed: 02/14/05						
Chloride	9.31		mg/L	10.0		93.1	80-120	1.49	20	
Calibration Check (EB51717-CCV1)				Prepared & Analyzed: 02/14/05						
Chloride	9.74		mg/L	10.0		97.4	80-120			
Duplicate (EB51717-DUP1)		**Source: 5B09012-02**		Prepared & Analyzed: 02/14/05						
Chloride	1790	50.0	mg/kg		1810			1.11	20	

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 2-18-05

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

Environmental Labs of Texas

Chain of Custody Form

12600 West I-20 East, Odessa, TX 79763
(915) 563-1800 FAX: (915) 563-1713

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain Olness
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	505-394-3481 / 505-394-2601
Client Company	Conoco Phillips
Facility Name	SEMU Permian Well 73
Project Reference	150008
EPI Sampler Name	Manuel Gonzales

Attn: Iain Olness
PO Box 1558,
Eunice, NM 88231-1558

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: CRUDE OIL	MATRIX: SLUDGE	MATRIX: OTHER:	PRESERV.: ACID/BASE	PRESERV.: ICE/COOL	PRESERV.: OTHER	SAMPLING: DATE	SAMPLING: TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH
5B09012-																						
-01 1	BH-1 (2')	C	1			X					X		3-Feb	11:00	X	X	X					
-02 2	BH-1 (5')	C	1			X					X		3-Feb	11:10	X	X	X					
-03 3	BH-1 (10')	C	1			X					X		3-Feb	12:49	X	X	X					
-04 4	BH-1 (15')	C	1			X					X		3-Feb	13:12	X	X	X		See Remarks			
-05 5	BH-2 (2')	C	1			X					X		3-Feb	14:10	X	X	X					
-06 6	BH-2 (5')	C	1			X					X		3-Feb	14:17	X	X	X					
-07 7	BH-2 (10')	C	1			X					X		3-Feb	14:45	X	X	X					
8																						
9																						
10																						

Sampler Relinquished: Manuel Gonzales	Date 2-9 Time 8:00	Received By:	E-mail results to: iolness@hotmail.com
Relinquished by:	Date 2-9 Time 16:15	Received By: (lab staff)	REMARKS: Only analyze Sample BH-1 (15') if analytical results for sample BH-1 (10') indicate TPH concentrations >100 ppm and/or benzene cocnentrations >10 ppm and/or BTEX concentrations > 50 ppm. If chloride concentrations in sample BH-1 (10') are >500 ppm, then analyze sample BH-1 (15') for chlorides. ** ANY QUESTIONS, PLEASE CONTACT IAIN**
Delivered by:	4.0 °C Sample Cool & Intact Yes No	Checked By: JMM	

4oz jar

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: Environmental Plus

Date/Time: 2/9/05 16:45

Order #: 5B09012

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	4.0 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	Yes	No	(Not present)
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

_____

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ATTACHMENT II

SOIL BORING LOGS

Log Of Test Borings

(NOTE - Page 1 of 1)

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 150008

Project Name: Conoco Phillips SEMU Permian Well 73

Location: UL-B, Section 19, Township 20 South, Range 38 East

Boring Number: BH-1 | Surface Elevation: 3,543

Start Date: 02/03/05 Time: 1055 hrs

Completion Date: 02/03/05 Time: 1312 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
1100	Cuttings	NA	Da	104	SP		SAND, Oil Stained
						5	
1110	CS	10	Da	74.4	SP		SAND, Oil Stained
						10	
1249	CS	12	Da	21.1	SP		SAND
						15	
1312	CS	8	Da	17.4	SP		SAND, Red
							End of Boring at 17.0'
						20	
						25	
						30	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
02/03/05	-	-	-	-	-
-	-	-	-	-	-

Drilling Method: HSA 3.5" ID

Backfill Method: Bentonite

Field Representative: MG

Log Of Test Borings

(NOTE - Page 1 of 1)

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 150008
Project Name: Conoco Phillips SEMU Permian Well 73
Location: UL-B, Section 19, Township 20 South, Range 38 East
Boring Number: SB-2
Surface Elevation: 3,548

Start Date: 02/03/05 Time: 1405 hrs
Completion Date: 02/03/05 Time: 1610 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
1410	Cuttings	NA	Da	28.4	SP		SAND, Brown
						5	
1417	CS	9	Da	10.3	SP		SAND, White
						10	
1445	CS	12	Da	7.2	SP		SAND, White
							End of Boring at 12.0'
						15	
						20	
						25	
						30	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
02/03/05	-	-	-	-	-
-	-	-	-	-	-

Drilling Method: HSA 3.5' ID
Backfill Method: Bentonite
Field Representative: MG

ATTACHMENT III

COPY OF INITIAL C-141

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-1
Revised October 10, 20

Submit 2 Copies to appropria
District Office in accordan
with Rule 116 on bac
side of for

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Rep

Name of Company ConocoPhillips Company	Contact John Abney
Address 4001 Penbrook Street Odessa, TX 79762	Telephone No. (505)391-3128
Facility Name SEMU Permian #73	Facility Type Oil Well

Surface Owner Bob McCasland	Mineral Owner BLM	Lease No. 031670B

LOCATION OF RELEASE

API # 30025 07822 0000

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	19	20S	38E	660	North	1980	East	

Latitude 32 33.561 Longitude 103 11.324

NATURE OF RELEASE

Type of Release Oil and Produced water	Volume of Release 35 barrels / Volume Recovered 28 barrels
Source of Release Flowline	Date and Hour of Occurrence 11/24/04 Date and Hour of Discovery 11/24/04
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Sylvia Dickey (via voice mail) NMOCD
By Whom? John Abney	Date and Hour 11/24/04 4:10 pm
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA

If a Watercourse was Impacted, Describe Fully.*
NA

RP# 1342

Describe Cause of Problem and Remedial Action Taken.*
Internal corrosion on flowline. Line was clamped for the weekend and then replaced 2 joints of pipe on Monday 11/29/04.

Describe Area Affected and Cleanup Action Taken.*
The area affected is 55' X 25' all free liquid was picked up. The site will have to be assessed to determine the appropriate remeditation necessary.

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: John Abney

Printed Name: John Abney

Title: SHEaR Specialist

E-mail Address: john.h.abney@conocophillips.com

Date: 11/30/2004 Phone: (505)391-3128

OIL CONSERVATION DIVISION

Approved by District Supervisor: ENVIRO ENGR

Approval Date: 5-23-07 Expiration Date:

Conditions of Approval: SUBMIT FINAL (SIGNED) Attached ☐

Attach Additional Sheets If Necessary

C-141 W/ CLOSURE RESULTS ATTACHED

RP# 1342