

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

*Risk  
apparently  
leached  
bedrock*

Submit 1 copy to  
appropriate  
District Office  
and 1 copy to  
the Santa Fe Office  
(Revised 3/9/94)

**PIT REMEDIATION AND CLOSURE REPORT**

30-045-23610

Operator: Dugan (Site Closed by El Paso Field Services)

Telephone: \_\_\_\_\_

Address: \_\_\_\_\_

Facility Or: Mexico Fed L - 1E, Meter 90840

Well Name \_\_\_\_\_

Location: Unit or Qtr/Qtr Sec C Sec 10 T 30 R 13 County San Juan

Pit Type: Separator \_\_\_\_\_ Dehydrator X Other \_\_\_\_\_

Land Type: BLM X, State \_\_\_\_\_, Fee \_\_\_\_\_ Other \_\_\_\_\_

Pit Location: Pit dimensions: length 20', width 19', depth 4'  
(Attach diagram)

Reference: wellhead X, other \_\_\_\_\_

Footage from reference: 87'

Direction from reference: 330 Degrees X East North \_\_\_\_\_  
of  
\_\_\_\_\_ West South \_\_\_\_\_

Depth To Ground Water	Less than 50 feet	(20 points)
(Vertical distance from	50 feet to 99 feet	(10 points)
contaminants to seasonal	Greater than 100 feet	( 0 points) <u>0</u>
high water elevation of		
ground water.)		

Wellhead Protection Area:	Yes (20 points)
(Less than 200 feet from a private	No ( 0 points) <u>0</u>
domestic water source, or; less than	
1000 feet from all other water sources.)	

Distance To Surface Water:	Less than 200 feet	(20 points)
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	( 0 points) <u>0</u>
irrigation canals and ditches.)		

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 01/30/95 Date completed: 01/30/95

Remediation Method: Excavation X Approx. cubic yards 60  
(Check all appropriate sections.) Landfarmed \_\_\_\_\_ Insitu Bioremediation \_\_\_\_\_  
Other \_\_\_\_\_

Remediation Location: Onsite \_\_\_\_\_ Offsite Tierra  
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: No line markers. Started remediating to 12'. Soil gray looking with hydrocarbon odor. At 12' soil still the same, gray with a H.C. odor. Closed pit.

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit: Sample location Four walls and center of pit composite  
Closure Sampling: \_\_\_\_\_  
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 12'

Sample Date 01/30/95 Sample time 16:35

Sample Results

Benzene(ppm) 74.7

Total BTEX(ppm) 974

Field headspace(ppm) 353

TPH 5410

Ground Water Sample: Yes \_\_\_\_\_ No X (If yes, attach sample results)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Date 4/23/03  
Signature Scott T. Pope

Printed Name  
and Title Scott Pope, Senior Environmental Scientist

Mexico Fed L-1E  
Meter/Line ID 90840

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**SITE DETAILS**

Legals - Twn: 30N	Rng: 13W	Sec: 10	Unit: C
NMOCD Hazard Ranking: 0		Land Type: BLM	
Operator: Dugan Production Company		Pit Closure Date: 1/30/95	

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**RATIONALE FOR RISK-BASED CLOSURE**

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The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A test pit was excavated to 12 feet (ft) below ground surface (bgs) and a soil sample was collected for field headspace and laboratory analysis for TPH and BTEX. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 353 ppm; laboratory analysis indicated a benzene concentration of 74.7 mg/kg, a total BTEX concentration of 974 mg/kg, and a TPH concentration of 5,410 mg/kg. The benzene, total BTEX and TPH measurements exceeded recommended remediation levels for the Hazard Ranking Score of 0.

Approximately 60 cubic yards of soil were excavated and hauled to Tierra, a commercial landfarm, for treatment and disposal. The pit was backfilled with clean soil and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed with auger refusal at 35.2 ft bgs. A soil sample was collected at 35 ft bgs for field headspace and laboratory analysis for TPH and BTEX. No groundwater was encountered in the soil boring. Headspace analysis indicated an organic vapor content of 558 ppm; laboratory analysis indicated a benzene concentration of 689 mg/kg, a total BTEX concentration of 4,420 mg/kg, and a TPH concentration of 54,400 mg/kg. The benzene, total BTEX and TPH concentrations were above recommended remediation levels for the Hazard Ranking Score of 0.

No Phase III activities were conducted.

El Paso Field Services requests closure of the above-mentioned pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for over 8 years.
- A majority of the impacted soil was excavated to the practical extent of the equipment and disposed of offsite.
- The pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- The clean soil from the berms placed on top of the excavation would limit the potential for direct contact with hazardous constituents by livestock or the public; i.e., direct contact exposure pathways are unlikely to be completed.
- Groundwater was not encountered in the soil boring at 35.2 ft bgs; local geologic features indicate the depth to groundwater is greater than 100 ft bgs.

**REVISED**  
**FIELD PIT SITE ASSESSMENT FORM**

GENERAL

Meter: 98040 Location: MEXICO FED LE-1<sup>HK</sup> L-1E  
Operator #: 1862 Operator Name: DUGAN P/L District: \_\_\_\_\_  
Coordinates: Letter C Section 10 Township: 30 Range: 13  
or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Pit Type: Dehydrator ☒ Location Drip: \_\_\_\_\_ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
Site Assessment Date: 1-12-95 Area: 02 Run: 31  
Revised Date: 1-27-03

SITE ASSESSMENT

**NMOCD Zone:**

(from NMCOD Maps)

**Land Type:**

BLM ☒ (1)

State ☐ (2)

Fee ☐ (3)

Indian \_\_\_\_\_

Inside ☒ (1)

Outside ☐ (2)

**Depth to Groundwater**

Less than 50 Feet (20 points) ☐ (1)

50 Feet to 99 Feet (10 Points) ☐ (2)

Greater than 100 Feet (0 Points) ☒ (3)

**Well Protection Area**

Is it less than 1000 feet from well, spring or other source of fresh water extraction?  
or; Is it less than 200 feet from a private domestic water source?

☐ YES (20 Points)

☒ NO (0 Points)

**Horizontal Distance to Surface Water Body**

Less than 200 Feet (20 points) ☐ (1)

200 Feet to 1000 Feet (10 Points) ☐ (2)

Greater than 1000 Feet (0 Points) ☒ (3)

Name of Surface Water Body LA PLATA RIVER

(Surface Water Body: Perennial River, Stream, Creek, Irrigation Canal, Ditch, Lake, Pond)

Distance to Nearest Ephemeral Stream ☐ (1) < 100 feet (Navajo Pits Only)

☐ (2) > 100 feet

**TOTAL HAZARD RANKING SCORE** 0 **POINTS**

REMARKS

Remarks: REASSESSMENT<sup>HK</sup> REVISION BASED ON REASSESSMENT  
OF THE DEPTH TO GROUNDWATER AND THE HORIZONTAL  
DISTANCE TO SURFACE WATER

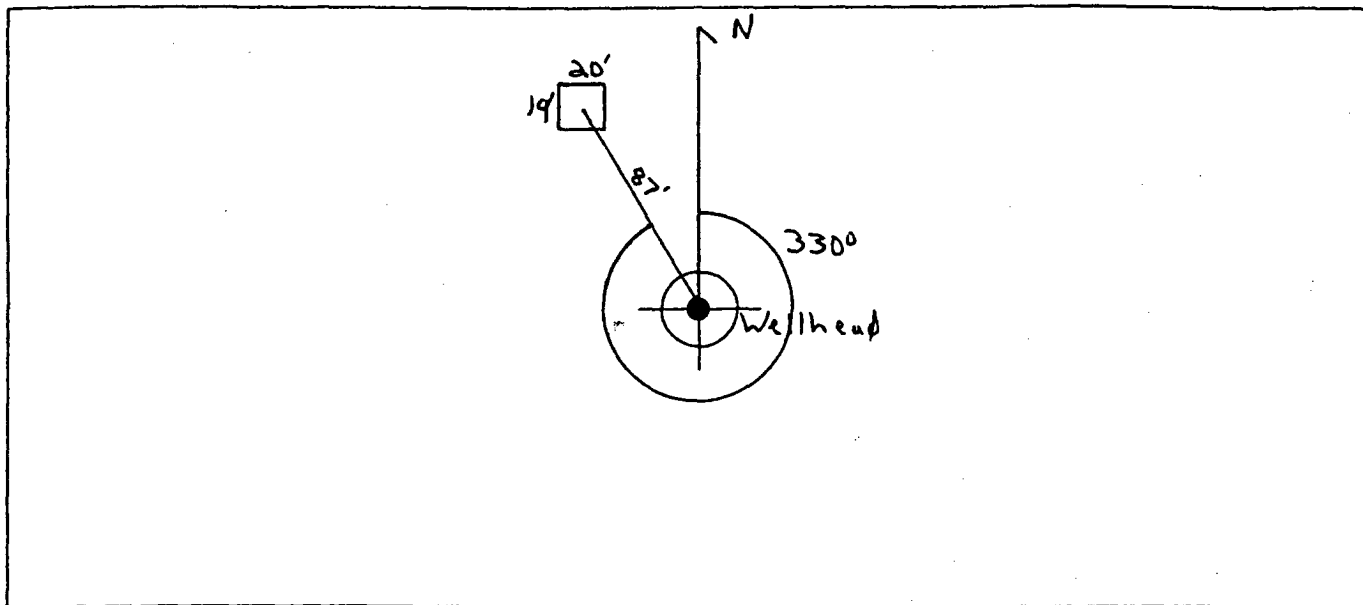
# FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>90840</u> Location: <u>Mexico Fed L-1E</u></p> <p>Operator #: <u>1862</u> Operator Name: <u>Dugan</u> P/L District: _____</p> <p>Coordinates: Letter: <u>C</u> Section <u>10</u> Township: <u>30</u> Range: <u>12</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>1/12/95</u> Area: <u>02</u> Run: <u>21</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps) Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Wellhead Protection Area :</p> <p>Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>N. Twin Wash (off LaPlata R.)</u></p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) &lt; 100' (Navajo Pits Only)</p> <p><input type="checkbox"/> (2) &gt; 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>40</u> POINTS</p>
REMARKS	<p>Remarks : <u>Redline Book: Inside</u> <u>Vulnerable Zone Type: Inside</u></p> <p><u>Pits - Close. Dehydrator pit discharging to 55 gal drum</u></p> <p style="text-align: right;"><u>01/24/95</u></p>

ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 330° Footage from Wellhead 87'  
b) Length : 20' Width : 19' Depth : 4'



REMARKS

Remarks :

Pictures @ 1449 hr 20-25 roll 1

Completed By:

Cory Chase  
Signature

1/12/95  
Date

# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>90840</u> Location: <u>Mexico Fed L-1E</u></p> <p>Coordinates: Letter: <u>C</u> Section <u>10</u> Township: <u>30</u> Range: <u>13</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>1-30-95</u> Run: <u>02</u> <u>31</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KP 400</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>353</u> PID Reading Depth <u>12'</u> Feet</p> <p>Groundwater Encountered <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>60</u></p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> <input checked="" type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>1-30-95</u> Pit Closed By: <u>B.E.I</u></p>
REMARKS	<p>Remarks : <u>No Line Markers started Remediating to 12' soil</u>  <u>Gray Looking with H.C order. At 12' soil still the same. gray with</u>  <u>A H.C order. closed P.F.</u></p> <p>Signature of Specialist: <u>Kelly Padilla</u></p>



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 400	946613
MTR CODE   SITE NAME:	90840	N/A
SAMPLE DATE   TIME (Hrs):	1-30-95	1635
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL:	2/2/95	2/2/95
DATE OF BTEX EXT.   ANAL:	1/31/95	2/1/95 + 2/2/95
TYPE   DESCRIPTION:	VC	Dark Brown sand and clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	74.7	MG/KG	0.76923		2.6	20
TOLUENE	411	MG/KG	1.09840			
ETHYL BENZENE	49.0	MG/KG	0.76923			
TOTAL XYLENES	0 = 93.3 ppm = 346 439	MG/KG	0 = 0.76923 ppm = 1.09840			
TOTAL BTEX	974	MG/KG				
TPH (418.1)	5410	MG/KG			1.94	28
HEADSPACE PID	353	PPM				
PERCENT SOLIDS	90.4	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

Surrogate Recovery was at 83.4 % for this sample All QA/QC was acceptable.  
Active:

DF = Dilution Factor Used

J.F.

Date:

2-22-95

# RECORD OF SUBSURFACE EXPLORATION

## PHILIP ENVIRONMENTAL

4000 Monroe Road  
Farmington, New Mexico 87401  
(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1

Well # \_\_\_\_\_

Page 1 of 1

Project Name EPNG PITS

Project Number 14509 Phase 6000 77

Project Location Mexico Fed L-1E 90840

Elevation \_\_\_\_\_

Borehole Location QC - S1D - T3D - R13

GWL Depth \_\_\_\_\_

Logged By CM CHANCE

Drilled By K Padilla

Date/Time Started 10/5/95 - 1345

Date/Time Completed 10/5/95 - 1530

Well Logged By CM Chance

Personnel On-Site K Padilla, F. Rivera, D. Charlie

Contractors On-Site \_\_\_\_\_

Client Personnel On-Site \_\_\_\_\_

Drilling Method 4 1/4" ID HSA

Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM $\Sigma$ BZ BH HS			Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15	1	15-17	18"	Br sandy CLAY, vf sand, soft, med plastic, odor			3	12	<u>2105</u> <u>1381</u>	-1348
20	2	20-22	12"	Br clayey SAND, vf-F sand, med dense, dry			7	38	<u>1798</u> <u>1054</u>	-1355
25	3	25-25.3	2"	lt Br clayey SAND, vf-F sand, v. dense, sl moist			12	180	<u>1027</u> <u>1239</u>	-1405
30	4	30-30.5	4"	Yellow SAND, vf-F, v. dense, dry			5	90	<u>525</u> <u>482</u>	-1414
35	5	35-35.2	2"	Br silty SAND, vf sand, v. dense, sl moist			8	78	<u>480</u> <u>558</u>	-1420
40				TDB 35.2'						

Comments:

Refusal @ 35' w/ auger. CMCI 31 (35-35.2) sent to lab (BTEX, TPH).  
BH grouted to surface

Geologist Signature

Core Chance



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC 131	947597
MTR CODE   SITE NAME:	90840	Mexico Fed L-1E
SAMPLE DATE   TIME (Hrs):	10-05-95	1430
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	10/6/95	
DATE OF BTEX EXT.   ANAL.:	10/6/95	10/9/95
TYPE   DESCRIPTION:	VG	CRK 320/11/35/10 VCLAY

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	689	MG/KG	50	D		
TOLUENE	2,550	MG/KG	50	D, D1		
ETHYL BENZENE	117	MG/KG	50	D		
TOTAL XYLENES	1,070	MG/KG	50	D		
TOTAL BTEX	4,420	MG/KG				
TPH (418.1)	54,400	MG/KG			.14	28
HEADSPACE PID	558	PPM				
PERCENT SOLIDS	88	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 97% for this sample All QA/QC was acceptable.

Relative:

Result for Toluene exceeded calibration range

DF = Dilution Factor Used

Approved By:

Date:

10-11-95