

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
defined
extent
of plume

Submit 1 copy to
appropriate
District Office
and 1 copy to
the Santa Fe Office

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

Operator: Merit Energy Company Telephone: _____

Address: 30-045-20174

Facility Or: Nickson #14, Meter 75766
Well Name _____

Location: Unit or Qtr/Qtr Sec D Sec 23 T 26 R 8 County San Juan

Pit Type: Separator _____ Dehydrator _____ Other Drip

Land Type: BLM X, State _____, Fee _____ Other _____

Pit Location: Pit dimensions: length 15', width 15', depth 2'

(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 75'

Direction from reference: 318 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>10</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): 10

Date Remediation Started: 09/20/94 Date completed: 09/20/94

Remediation Method: Excavation _____ Approx. cubic yards _____

(Check all appropriate sections.)

Landfarmed	Insitu Bioremediation
<p>1. Excavation and Landfilling</p> <p>2. Soil Washing</p> <p>3. Soil Vapor Extraction</p> <p>4. Soil Biotreatment</p> <p>5. Soil Incineration</p> <p>6. Soil Stabilization/Solidification</p> <p>7. Soil Capping</p> <p>8. Soil Monoculture</p> <p>9. Soil Phytoremediation</p> <p>10. Soil Microbial Remediation</p> <p>11. Soil Electrokinetic Remediation</p> <p>12. Soil Thermal Desorption</p> <p>13. Soil Steam Stripping</p> <p>14. Soil Air Sparging</p> <p>15. Soil Water Flooding</p> <p>16. Soil Bioremediation</p> <p>17. Soil Phytoremediation</p> <p>18. Soil Microbial Remediation</p> <p>19. Soil Electrokinetic Remediation</p> <p>20. Soil Thermal Desorption</p> <p>21. Soil Steam Stripping</p> <p>22. Soil Air Sparging</p> <p>23. Soil Water Flooding</p> <p>24. Soil Bioremediation</p> <p>25. Soil Phytoremediation</p> <p>26. Soil Microbial Remediation</p> <p>27. Soil Electrokinetic Remediation</p> <p>28. Soil Thermal Desorption</p> <p>29. Soil Steam Stripping</p> <p>30. 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Soil Bioremediation</p> <p>201. So</p>	

In situ Bioremediation

Other Backfill pit without excavation _____

Backfill pit without excavation

Remediation Location: Onsite N/A Offsite N/A

(i.e. landfarmed onsite,
name and location of
offsite facility)

Offsite	N/A
---------	-----

General Description of Remedial Action: _____

Ground Water Encountered: No X Yes Depth

No X Yes Depth

**Final Pit:
Closure Sampling:
(if multiple samples,
attach sample results
and diagram of sample
locations and depths)**

Sample location Four walls and center of pit composite

Four walls and center of pit composite

Sample depth 12'

Sample Date 09/20/94 Sample time 09:20

Sample time 09:20

Sample Results

Benzene(ppm) Not reported

Not reported

Total BTEX(ppm) Not reported

Not reported

Field headspace(ppm) 2

TPH 2420

2420

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

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 11/13/08

Signature

Printed Name

and Title

Scott T. Pope

Senior Env. Scientist



Unit: D

Legals - Twn: 26N

Rng: 8W

Sec: 23

Unit: D

NMOCD Hazard Ranking: 10

Land Type: BLM

Operator: Merit Energy Company

Pit Closure Date: 9/20/94

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) where a soil sample was collected for field headspace analysis and laboratory analysis for TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 2 ppm; laboratory analysis indicated a TPH concentration of 2,420 mg/kg. The TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 10.

No soil was disposed of offsite. The pit was backfilled with site soil, topped with clean soil from the surrounding berms, and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed to refusal at 22 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 20-22 ft bgs. Headspace analysis indicated an organic vapor content of 1 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3 mg/kg, and a TPH concentration of <20 mg/kg. The benzene, BTEX and TPH concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were conducted.

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

- The primary source, discharge to the pit, has been removed for over eight years.
- The test 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., current direct contact exposure pathways are unlikely to be completed.
- Groundwater was not encountered in the soil boring at 22 ft bgs; local geologic features indicate the depth to groundwater is greater than 50 ft bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.



PIT CLOSURE REQUEST

- Benzene, total BTEX, and TPH concentrations in the soil sample collected at the base of the Phase II soil boring at 20 ft bgs were non-detect, indicating that no significant downward constituent migration is occurring.
- Residual hydrocarbons in the soil will likely degrade by natural attenuation with minimal risk to human health and the environment.

ATTACHMENTS

Field Pit Assessment Form

Revised Field Pit Assessment Form

Field Pit Remediation/Closure Form

Phase II Soil Boring Log

Laboratory Analytical Results

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 75766 Location: Nickson #14
 Operator #: _____ Operator Name: _____ P/L District: _____
 Coordinates: Letter: D Section 23 Township: 26 Range: 8
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 4/8/98 Area: _____ Run: _____

SITE ASSESSMENT

NMOCD Zone:
(From NMOCD
Maps)

Inside
Outside

Land Type:

☐ (1)
☒ (2)

BLM ☒ (1)
State ☐ (2)
Fee ☐ (3)
Indian _____

Depth to Groundwater

Less Than 50 Feet (20 points)
50 Ft to 99 Ft (10 points)
Greater Than 100 Ft (0 points)

☐ (1)
☒ (2)
☐ (3)

Wellhead Protection Area

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?

☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body

Less Than 200 Ft (20 points)
200 Ft to 1000 Ft (10 points)
Greater Than 1000 Ft (0 points)

☐ (1)
☐ (2)
☒ (3)

Name of Surface Water Body _____

(Surface Water Body: Perennial Rivers, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

Distance to Nearest Ephemeral Stream

☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 10 POINTS

REMARKS

Remarks : Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site is <100' vertical from center of Big Rincon Canyon

FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>75766</u> Location: <u>NICKSON #14</u> Operator #: <u>0177</u> Operator Name: <u>MERIT ENERGY CO.</u> P/L District: <u>BALLARD</u> Coordinates: Letter: <u>D</u> Section <u>23</u> Township: <u>26</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____ Site Assessment Date: <u>6.16.94</u> Area: <u>07</u> Run: <u>51</u>	
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps) Inside <input type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2)	
	Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____	
	Depth to Groundwater Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)	
	Wellhead Protection Area : 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)	
REMARKS	Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)	
	Name of Surface Water Body _____ (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100' TOTAL HAZARD RANKING SCORE: <u>10</u> POINTS	
Remarks : <u>TWO PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY.</u> <u>LOCATION IS AT THE EDGE OF THE BIG PINCON CANYON AT THE BASE OF</u> <u>SOME CLIFFS. REDLINE AND TOPO CONFIRMED LOCATION IS OUTSIDE VIZ</u> <u>POINT 1A</u>		



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW 204	946168
MTR CODE SITE NAME:	75766	N/A
SAMPLE DATE TIME (Hrs):	9-20-94	0920
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	9-22-94	9-22-94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Brown fine sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	2420	MG/KG			2.08	28
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	96.7	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

Date:

9/30/94

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>Z5766</u> Location: <u>Nickson #14</u></p> <p>Coordinates: Letter: <u>D</u> Section <u>23</u> Township: <u>26</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>9-20-94</u> Run: <u>07</u> <u>51</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>VW304</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>2</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input type="checkbox"/> Approx. Cubic Yards _____</p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input checked="" type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> Tierra <input type="checkbox"/></p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>9-20-94</u> Pit Closed By: <u>BEI</u></p>
REMARKS	<p>Remarks : _____</p> <p>_____</p> <p>_____</p>
	<p>Signature of Specialist: <u>Vale Wilson</u></p>



Page _____ of _____

REQUESTED TURNAROUND TIME:

10

1

Figure 1

087 01 73

15/01/20

1



PHASE II DRILLING

CHAIN OF CUSTODY RECORD 10-21-98 Anal. 10-21-98 Appr. 10-21-98 Chem.

Page 1 of 1

PROJECT NUMBER # 24324		PROJECT NAME Pit Closure Project		TOTAL NUMBER OF CONTAINERS		SAMPLE TYPE		REQUESTED ANALYSIS						CONTRACT LABORATORY P. O. NUMBER																								
LAB ID		DATE		TIME		MATRIX		FIELD ID		TPH EPA 418.1		BTEX EPA 8020		LAB PID		TPH 8015		FIELD PID		SEQUENCE #		REMARKS																
980651		9/15/98		152		Soil		HAB35		1		Vg		✓		✓		✓		1		36		NICKSON #14 75766 20-22'														
<div style="text-align: center;">HAB 9/15/98</div>																							RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME	
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																							Holly Brackley		9/15/98 1655		Holly Brackley		9/15/98 0928		Holly Brackley		9/15/98 0928		Holly Brackley		9/15/98 0928	
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																							Holly Brackley		9/15/98 1655		Holly Brackley		9/15/98 0928		Holly Brackley		9/15/98 0928		Holly Brackley		9/15/98 0928	
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																							Holly Brackley		9/15/98 1655		Holly Brackley		9/15/98 0928		Holly Brackley		9/15/98 0928		Holly Brackley		9/15/98 0928	

REQUESTED TURNAROUND TIME:
☐ ROUTINE ☐ RUSH

CARRIER CO.

BILL NO.

SAMPLE RECEIPT REMARKS
cool & IN FACT 28° F

CHARGE CODE

RESULTS & INVOICES TO:
FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P.O. BOX 4990
FARMINGTON, NEW MEXICO 87499

505-599-2144
FAX: 505-599-2261

**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB35	980651
MTR CODE SITE NAME:	75766	Nickson #14
SAMPLE DATE TIME (Hrs):	9/15/98	0952
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	9/23/98	9/25/98
DATE OF BTEX EXT. ANAL.:	9/17/98	9/17/98
TYPE DESCRIPTION:	VG	SOIL

Field Remarks: 20-22'

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG				
TOLUENE	<0.5	MG/KG				
ETHYL BENZENE	<0.5	MG/KG				
TOTAL XYLENES	<1.5	MG/KG				
TOTAL BTEX	<3	MG/KG				
TPH (MOD.8015)	<20	MG/KG				
HEADSPACE PID	1	PPM				
PERCENT SOLIDS	96.5	%				

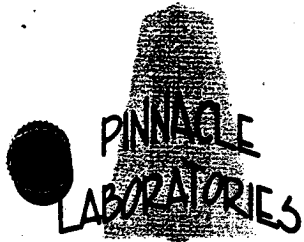
-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 90.3 % for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: John Leitch

Date: 10/8/98



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : PHASE II DRILLING

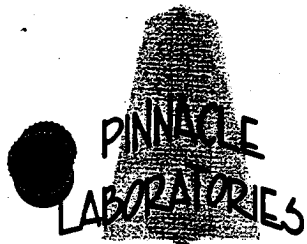
PINNACLE I.D.: 809047

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	980648	NON-AQ	9/14/98	9/23/98	9/25/98	1
02	980649	NON-AQ	9/14/98	9/23/98	9/25/98	1
03	980650	NON-AQ	9/14/98	9/23/98	9/25/98	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
FUEL HYDROCARBONS, C6-C10	10	MG/KG	55	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	610	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	420	< 5.0	< 5.0
CALCULATED SUM:			1085		

SURROGATE:
O-TERPHENYL (%) 114 103 99
SURROGATE LIMITS (66 - 151)

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : PHASE II DRILLING

PINNACLE I.D.: 809047

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	
04	980651	NON-AQ	9/15/98	9/23/98	9/25/98	1
05	980652	NON-AQ	9/15/98	9/23/98	9/25/98	1
PARAMETER		DET. LIMIT	UNITS	04	05	
FUEL HYDROCARBONS, C6-C10		10	MG/KG	< 10	< 10	
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	< 5.0	< 5.0	
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	< 5.0	< 5.0	
CALCULATED SUM:						

SURROGATE:
BIPHENYL (%)
SURROGATE LIMITS

(66 - 151)

101

101

CHEMIST NOTES:
N/A

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

4000 Monroe Road
Albuquerque, New Mexico 87401
505-226-2262 FAX (505) 326-2388

Borehole # BH- 1
Well # NA
Page 1 of 1

Project Number 19643 Phase 1001.77
Project Name EPFS PITS >10
Project Location NICKSON #17 75766

Elevation _____
Borehole Location LTR: D S: 23 T: 26 R: 8
GWL Depth NA
Drilled By K. PADILLA
Well Logged By H. BRADBURY
Date Started 9/15/98
Date Completed 9/15/98

Drilling Method 4 1/4 ID HSA
Air Monitoring Method PID

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			Drilling Conditions & Blow Counts
							BZ	BH	S/HS	
0										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5										
10				EXCAVATION SAMPLE collected at 12'						
15	1	15-17	24	LT BR silty SAND, FINE SAND, LOOSE, dry	SM		0	0	0 1	945 hrs
20	2	20-22	24	LT BR SANDSTONE, FINE SAND, low cementation, dry TOB 22			0	0	0	952 hrs
25										
30										
35										
40										

Comments:

HAB35 20-22 SENT to lab for TPH, BTEX GW NOT ENCOUNTERED
BH GROVED TO SURFACE

Geologist Signature

H. Bradbury

BTEX SOIL SAMPLE WORKSHEET

File : 980651
Soil Mass (g) : 5.09
Extraction vol. (mL) : 10
Shot Volume (uL) : 50

Date Printed : 9/23/98
Multiplier (L/g) : 0.00098
CAL FACTOR (Analytical): 200
CAL FACTOR (Report): 0.19646

Benzene (ug/L) : <0.5
Toluene (ug/L) : <0.5
Ethylbenzene (ug/L) : <0.5
p & m-xylene (ug/L) : <1.0
o-xylene (ug/L) : <0.5

DILUTION FACTOR:	1	Det. Limit
Benzene (mg/Kg):	#VALUE!	0.491
Toluene (mg/Kg):	#VALUE!	0.491
Ethylbenzene (mg/Kg):	#VALUE!	0.491
p & m-xylene (mg/Kg):	#VALUE!	0.982
o-xylene (mg/Kg):	#VALUE!	0.491
Total xylenes (mg/Kg):	#VALUE!	1.473
Total BTEX (mg/Kg):	#VALUE!	