

OK - did year 1
bedroom

SUBMIT COPY TO:
 NATURAL RESOURCE DIVISION
 AND OIL & GAS ADMINISTRATION

DEC 11 1954
OIL COM. DIV.
DIST. SPIRIT

528
APR 2000
AP
REPORT

APPROVED

SPIT REMEDIATION AND CLOSURE REPORT

Land Type: _____

Direction from reference: _____ Degrees _____ of East North _____
 _____ West South _____

Distance To Surface Water:
(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 100 feet	(20 points)
100 feet to 1000 feet	(10 points)
Greater than 1000 feet	(0 points)

0

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 8/12/98 Date Completed: 8/17/98

Remediation Method: Excavation X

Approx. cubic yards 900 CY

(Check all appropriate sections)

Landfarmed X

Insitu Bioremediation _____

Other _____

Remediation Location: Onsite X Offsite _____

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

General Description of Remedial Action: REMOVED CONTAMINATED SOIL USING BACKHOE AND EXCAVATOR, SPREAD ON LOCATION IN SOIL FARM

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit: Sample location PIT BOTTOM - CENTER 4 BANKS N,S,E,W
Closure Sampling: (WEATHERED ROCK AT 18') GAS ND PPA
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 22' DIE ND PPM

Sample date 8/17/98 Sample time 10:45A

METHOD 8015M
P10 22.3 PPM

Sample Results

Soil Benzene (ppm) N/A Water: Benzene (ppb) N/A

Total BTEX (ppm) N/A Toluene (ppb) N/A

Field Headspace (ppm) 45.0 Ethylbenzene (ppb) N/A

TPH 8015M (ppm) GAS 0.22 PPM Total Xylenes (ppb) N/A
DIE 83 PPM

Groundwater 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 11/13/98 PRINTED NAME SHAWN ADAMS

SIGNATURE [Signature] AND TITLE ENV. CONSULTANT

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) R.A. Attached

SIGNED: [Signature] DATE: 11-25-98

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Aug-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Martin Whittaker No.35
Work Order:	9808041	Client Sample ID:	MW35-100 Floor
Lab ID:	9808041-05A	Matrix:	SOIL
Project:	Pit Remediation	Collection Date:	8/17/98 10:45:00 AM
		COC Record:	4395

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	83	25		mg/Kg	1	8/26/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	0.22	0.18		mg/Kg	1	8/20/98

Qualifiers:

- PQL - Practical Quantitation Limit
- ND - Not Detected at Practical Quantitation Limit
- J - Analyte detected below Practical Quantitation Limit
- B - Analyte detected in the associated Method Blank

- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BUILDING ANALYTICAL SERVICES, INC.

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Aug-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Martin Whittaker No.35
Work Order:	9808041	Client Sample ID:	MW35-101 Wall
Lab ID:	9808041-06A	Matrix:	SOIL
Project:	Pit Remediation	Collection Date:	8/17/98 1:15:00 PM
		COC Record:	4395

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	8/26/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	8/20/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

1 of 1

CONTRACT ENVIRONMENTAL

Elm Ridge

Daily Site Sheet

Site Name: No 35 Martin Whiteaker

Date: 8-12-98

Time Started: 10:00

Time Finished: _____

Pit starting size: 20x20x5

Pit size when finished: _____

Land farm size: _____

Distance to wash > or < 100': _____

Distance to lake or pond: _____

Distance to private or domestic water source > or < 1000': _____

P.I.D. Readings

North wall: _____

South wall: _____

East wall: _____

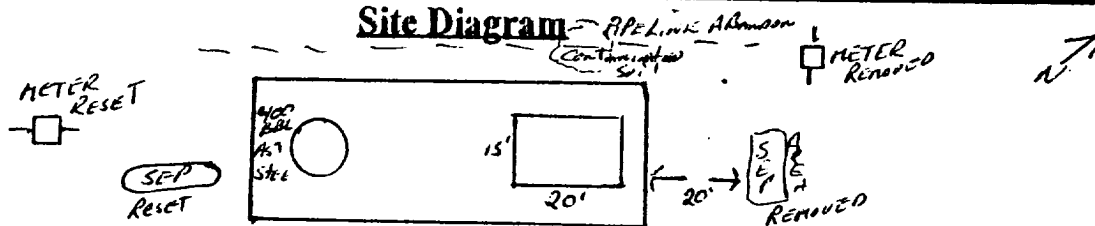
West wall: _____

Land farm: _____

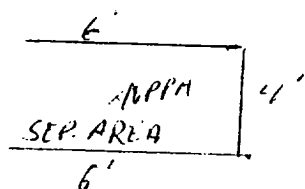
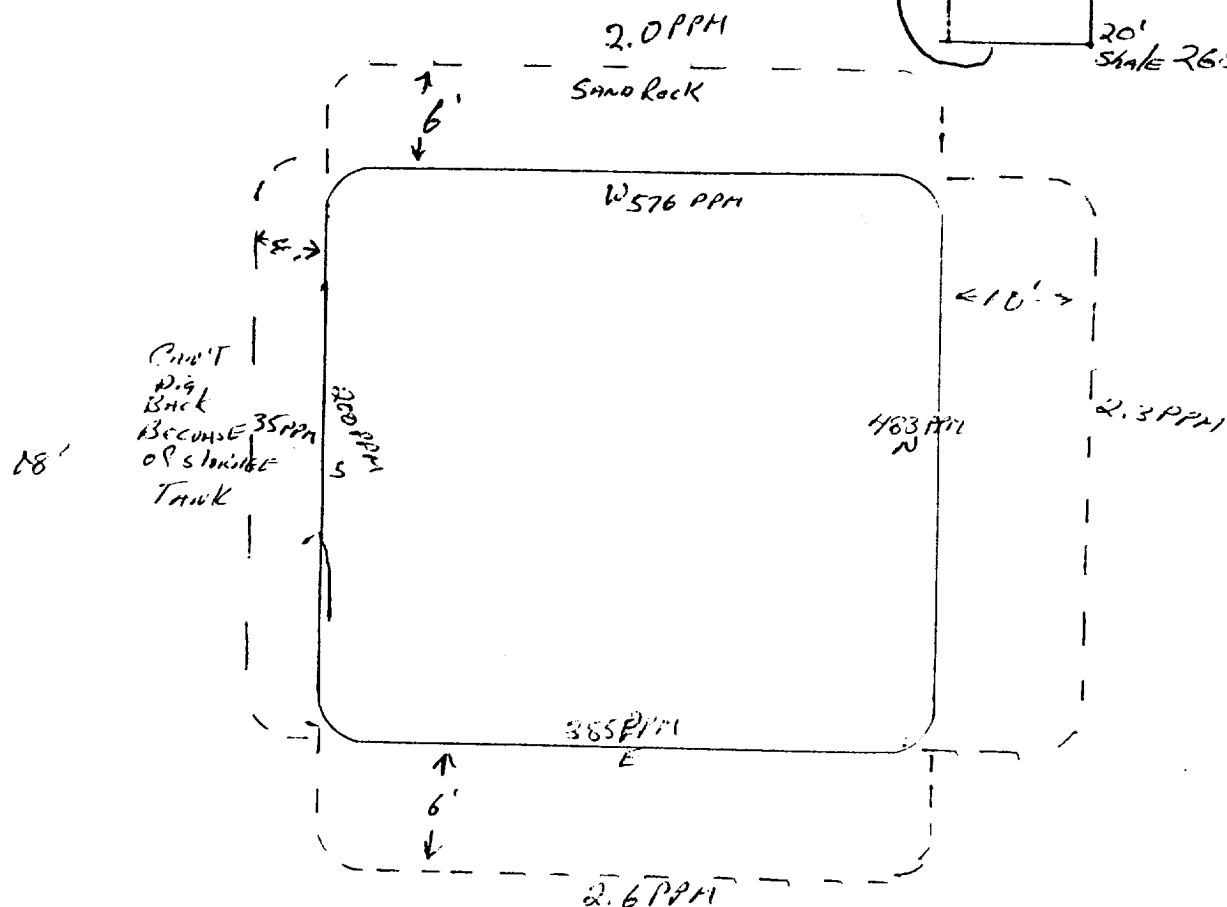
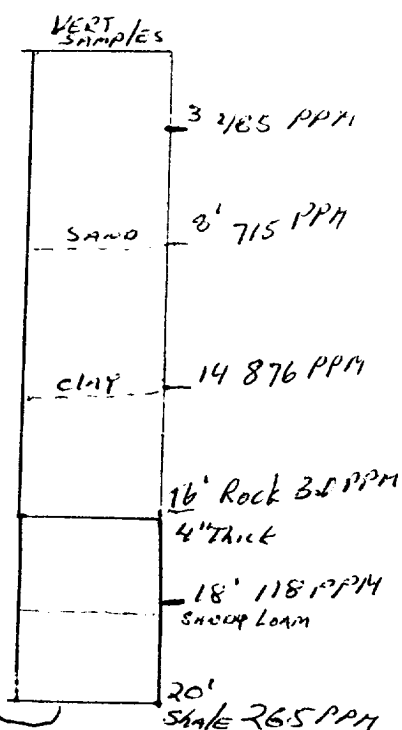
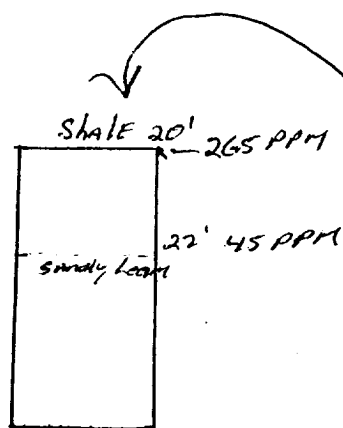
Equipment used: P.S.D Backhoe Jim Kirby Linin Wilson

Remarks: PID

Site Diagram



1st Floor 45.0 PPM AT 22'
 4 wall cont 223 PPM
 5th Floor 10.2 PPM
 5th 4 wall cont 26.4 PPM



3 x all Corp
26.4

CONTRACT ENVIRONMENTAL

Elm Ridge

Daily Site Sheet

Site Name: No 35 Martin W. Haker

Date: 8-14-98

Time Started: 12:00

Time Finished: 1:30 8-17-98

Pit starting size: 20x20x5

Pit size when finished: 32x34x82

Land farm size: _____

Distance to wash > or < 100': _____

Distance to lake or pond: _____

Distance to private or domestic water source > or < 1000': _____

P.I.D. Readings

North wall: _____

South wall: _____

East wall: _____

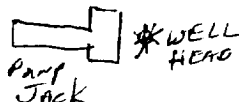
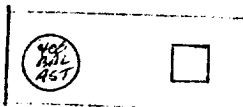
West wall: _____

Land farm: _____

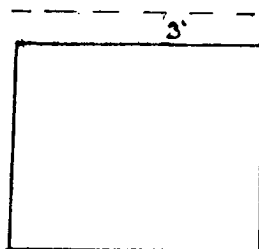
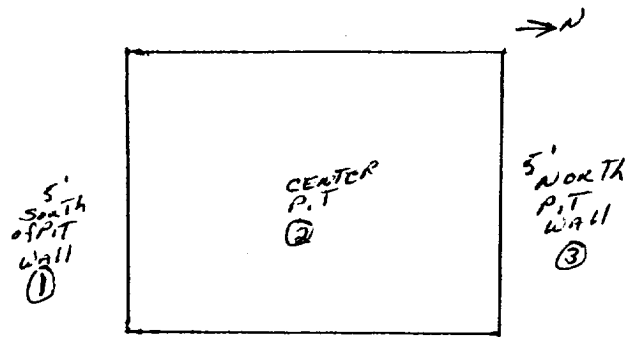
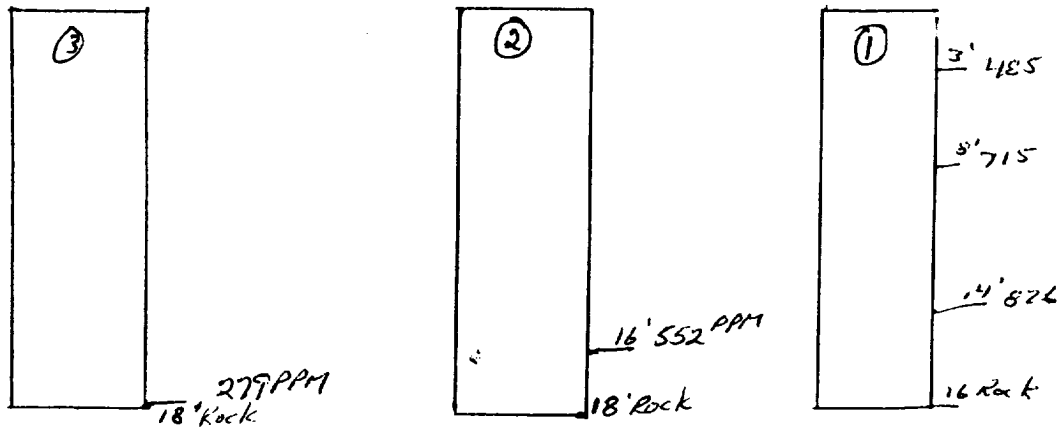
Equipment used: P.S.D PID EXCAVATOR Jim Kirby Linin Wiker

Remarks: Dig P.T AREA 2 402 TNR Samples From P.T 4 wall Comp
P.D 22.3. PPM 1 Point Sample From Floor of P.T 45 PPM 22' DEEP
SEPAKEA Floor 10 PPM 3 wall Comp 26.4. PPM

Site Diagram



MRIT Samples
5' South of P.T. + Bank





CHAIN OF CUSTODY RECORD

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 8-17-98 Page 1 of 1

Purchase Order No.:		Job No.		Name		Title	
SEND INVOICE TO		Company		Company		Company	
Address		Dept.		Mailing Address		Mailing Address	
City, State, Zip		City, State, Zip		City, State, Zip		City, State, Zip	
Telephone No.		Telephone No.		Telephone No.		Telephone No.	
Telefax No.		Telefax No.		Telefax No.		Telefax No.	
Sampling Location: <u>Martin Whiteaker No. 35, No. 31, No. 32, No. 34</u>				ANALYSIS REQUESTED			
Sampler: <u>LRW</u>				LAB ID			
SAMPLE IDENTIFICATION		SAMPLE DATE		MATRIX		PRES.	
MW 31-200 Floor		8/18/98 9:15		Soil		u/a	
MW 31-201 Wall		8/18/98 10:00		Soil		u/a	
MW 32-300 Floor		8/18/98 12:45		Soil		u/a	
MW 32-301 Wall		8/18/98 12:55		Soil		u/a	
MW 35-100 Floor		8/17/98 10:45		Soil		u/a	
MW 35-101 Wall		8/17/98 1:15		Soil		u/a	
MW 35-102 Ser. Floor		8/17/98 1:30		Soil		u/a	
MW 35-103 Ser. Wall		8/17/98 1:25		Soil		u/a	
MW 34-100 Floor		8/17/98 10:15		Soil		u/a	
MW 34-101 Wall		8/17/98 10:30		Soil		u/a	
Relinquished by: <u>[Signature]</u>				Date/Time: <u>8/17/98 15:50</u>		Received by: <u>[Signature]</u>	
Relinquished by:				Date/Time		Date/Time	
Relinquished by:				Date/Time		Date/Time	
Method of Shipment:				Rush		Special Instructions:	
Authorized by:				Date		Date	
(Client Signature Must Accompany Request)				Date		Date	

Elm Ridge Resources

Risk Analysis

Prepared by:

Contract Environmental Services, Inc.

Prepared for:

Oil Conservation Division - District III

Jicarilla Apache Tribe - EPO

Date: 11/23/98

Location: Martin Whittaker # 35 - Separator Pit

NE / NE, Sec 15, T23N, R4W

Lease Number:

Resources

Ground Water: 100 feet +

Closest Surface Water: No down gradient perennial bodies within 1000 feet
(visual inspection of the area)

Water Sources: No private water source is located within 1000 feet
of this site.

Risk Management

Natural Barriers: Natural soil permeability is one natural barrier that
will protect ground water from site contamination.

**Additional
Investigation:**

This earthen pit had shale bedrock at 18' of depth. Field-testing and laboratory analysis was done on this earthen pit. The results of this analysis and testing are shown in the following pages. All data is supported with lab result sheets and field data sheets found in this closure package.

Risk Analysis

Contract Environmental Services, Inc.

Post Office Box 3376

Farmington, New Mexico 87499

Additional
Investigation: (continued)

Table 1. Field and laboratory results summary.

Sample				
	Depth	Field Headspace Results	Laboratory Results	Remarks
	(feet)	(PPM)	(PPM)	
MW35-100	22'	45	Gas = 0.22 Die = 83	Pit Bottom
MW35-101	22'	22.3	Gas = ND Die = ND	4 Banks NSEW

Risk

The following table and conclusion summarize the risk this contamination sources poses to the ground water.

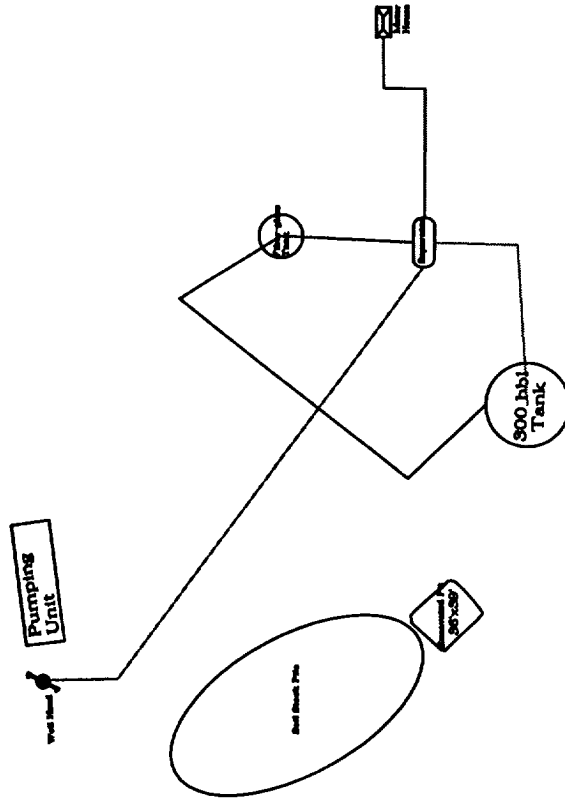
Table 2. Total risk table.

RISK	CHOICE
Extremely Low	X
Low	
Moderate	
High	

Risk Analysis

Contract Environmental Services, Inc.
Post Office Box 3376
Farmington, New Mexico 87499

The ground water under this site is at almost no danger of being impacted by contamination from this site. From the low laboratory and field-test results and the restrictive geologic soil barriers it is concluded that the risk of resource contamination is extremely low.



11220:	Oil
	Water
	Gas
	Oil/Water
	Gas/Oil/Water

Field Data Recorded : _____ Date: _____

Reviewed : _____ Date: _____

Drawn : _____ Date: _____

Elm Ridge Resources

Martin Whittaker 35

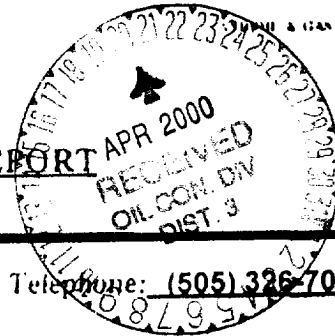
NE/NE Sec. 15, T23N, R4W Rio Arriba County, NM

Contract Environmental Services, Inc.
505-325-1198
Farmington, New Mexico

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

SUBMIT COPY TO
NATURAL RESOURCES DEPT
OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT



Operator: Elm Ridge Resources

Telephone: (505) 326-7099

Address: 312 W La Plata, Farmington NM 87401

Facility or Well Name: Martin Whittaker #35

Location: Unit or Qtr/Qtr Sec NE/NE Sec 15 T 23N R 4W County Rio Arriba

Land Type: Jicarilla Range

Date Remediation Started: 8-17-99

Date Completed: 8-26-99

Remediation Method: Landfirmed X

Approx. cubic yards 750

Composted

Other

Depth To Groundwater: (pts.) 0

Final Closure Sampling:

Distance to an Ephemeral Stream (pts.) 10

Sampling Date: 8-26-99 Time: 1302

Distance to Nearest Lake, Playa, or Watering Pond (pts.) 0

Sample Results:

Wellhead Protection Area: (pts.) 0

Field Headspace (ppm) 10.3

Distance To Surface Water: (pts.) 0

TPH (ppm) GRO NO Method 8015

Other ORO 380

RANKING SCORE (TOTAL POINTS):

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 9-23-99 PRINTED NAME Bill Schaaphok

SIGNATURE Bill Schaaphok AND TITLE Environmental Specialist

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE

APPROVED: YES NO (REASON)

SIGNED: DATE:

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 09-Sep-99

Client:	Elm Ridge Resources, Inc.	Client Sample Info:	Elm Ridge Landfarm
Work Order:	9908058	Client Sample ID:	MW #35 LF 1-3
Lab ID:	9908058-03A	Matrix:	SOIL
Project:	Elm Ridge Landfarms	Collection Date:	8/26/99 1:02:00 PM
		COC Record:	10257

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: HR
T/R Hydrocarbons: C10-C28	380	25		mg/Kg	1	9/7/99
GASOLINE RANGE ORGANICS		SW8015B				Analyst: DM
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	8/31/99

Qualifiers:

- PQL - Practical Quantitation Limit
- ND - Not Detected at Practical Quantitation Limit
- J - Analyte detected below Practical Quantitation Limit
- B - Analyte detected in the associated Method Blank

- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE L.L.O. -

Location : <u>Martin Whittaker # 35</u>		Overview of Landfarm and Sampling :																																								
Quad : <u>NE/NE</u> Section : <u>15</u>																																										
Township: <u>23N</u> Range: <u>4W</u>																																										
Pit : <u>Separator</u>																																										
Reference : <u>60' North</u>																																										
Size : <u>22.5 x 90 x 1</u>		Comments : <u>Sandy loam, light brown, covered with vegetation, rocky broken sandstone scattered stinging, no odor, sample depth 8" to 12"</u>																																								
Yds : <u>750</u>																																										
5-5 - Point Composite																																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Sample #</th> <th style="width: 20%;">Location</th> <th style="width: 10%;">OVM</th> </tr> </thead> <tbody> <tr><td>1</td><td>1-1</td><td>6.3</td></tr> <tr><td>2</td><td>1-2</td><td>5.9</td></tr> <tr><td>3</td><td>1-3</td><td>10.3</td></tr> <tr><td>4</td><td>1-4</td><td>1.3</td></tr> <tr><td>5</td><td>1-5</td><td>0.0</td></tr> <tr><td>6</td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td></tr> </tbody> </table>				Sample #	Location	OVM	1	1-1	6.3	2	1-2	5.9	3	1-3	10.3	4	1-4	1.3	5	1-5	0.0	6			7			8			9			10			11			12		
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Environmental Specialist :																																										

SUBMITTED COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

APPROVED

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 8/12/98

Date Completed: 8/17/98

Remediation Method: Excavation X

Approx. cubic yards 900 CY

(Check all appropriate sections)

Landfarmed X

In situ Bioremediation _____

Other _____

Remediation Location:

Onsite X Offsite _____

(i.e. landfarmed onsite,

name and location of

offsite facility) _____

General Description of Remedial Action: REMOVED CONTAMINATED SOIL USING

BACKHOE AND EXCAVATOR, SPREAD ON LOCATION IN SOIL FARM

Groundwater Encountered:

No X Yes _____

Depth _____

Final Pit:

Sample location Pit Bottom - CENTER

4 BANKS N,S,E,W

Closure Sampling:

(if multiple samples,

attach sample results

and diagram of sample

locations and depths)

(WEATHERED ROCK AT 18')

GAS ND PPM

Sample depth 22'

DIE ND PPM

Sample date 8/17/98

Sample time 10:45A

METHOD 8015M

P10 22.3 PPM

Sample Results

Soil: Benzene

(ppm)

N/A

Water: Benzene

(ppb)

N/A

Total BTEX

(ppm)

N/A

Toluene

(ppb)

N/A

Field Headspace (ppm)

45.0

Ethylbenzene

(ppb)

N/A

TPH 8015M (ppm) GAS 0.22 PPM

Total Xylenes

(ppb)

N/A

DIE 83 PPM

Groundwater 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

11/23/98

PRINTED NAME

SHAWN ADAMS

SIGNATURE

[Signature]

AND TITLE

ENV. CONSULTANT

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____

(REASON)

R.A. Attached

SIGNED: [Signature]

DATE:

11-25-98