

OK

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SUBMIT COPY 1
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

DEC - 2 1999

APPROVED

7401

APR 2000
RECEIVED
OIL CON. DIV
DIST. 3

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

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 8/26/98 Date Completed: 8/27/98

Remediation Method: Excavation X Approx. cubic yards 600 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 AN 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: (ROCK AT 13') GAS 0.26 PPM
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 13' DIE 49 PPM
Sample date 8/27/98 Sample time 10:05 AM METHOD: BOISM
PID = 23.2 PPM

Sample Results

Soil: Benzene (ppm)	<u>N/A</u>	Water: Benzene (ppb)	<u>N/A</u>
Total BTEX (ppm)	<u>N/A</u>	Toluene (ppb)	<u>N/A</u>
Field Headspace (ppm)	<u>21.2</u>	Ethylbenzene (ppb)	<u>N/A</u>
TPH <u>BOISM</u> (ppm)	<u>GAS 0.2 PPM</u>	Total Xylenes (ppb)	<u>N/A</u>
	<u>DIE 120 PPM</u>		

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 11/24/98 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: 10-Sep-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Martin Whittaker #33
Work Order:	9808058	Client Sample ID:	MW33-300; Pit Floor
Lab ID:	9808058-03A	Matrix:	SOIL
Project:	Pit Remediation	Collection Date:	8/27/98 10:05:00 AM
		COC Record:	4391

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	120	25		mg/Kg	1	9/4/98
GASOLINE RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C6-C10	0.2	0.18		mg/Kg	1	9/1/98

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 BLENDING INDUSTRY WITH THE ENVIRONMENT -

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 10-Sep-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Martin Whittaker #33
Work Order:	9808058	Client Sample ID:	MW33-301; 4 Wall Comp
Lab ID:	9808058-04A	Matrix:	SOIL
Project:	Pit Remediation	Collection Date:	8/27/98 10:10:00 AM
		COC Record:	4391

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	49	25		mg/Kg	1	Analyst: HR 9/4/98
GASOLINE RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C6-C10	0.26	0.18		mg/Kg	1	Analyst: DC 8/31/98

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 FARMING WORLD

CONTRACT ENVIRONMENTAL

Elm Ridge

Daily Site Sheet

Site Name: MARTIN WH. HAKER No 33

Date: 8-26-98

Time Started: 9:30

Time Finished: 10:30 8-27-98

Pit starting size: 15x20x4

Pit size when finished: 28x45x13'

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: _____

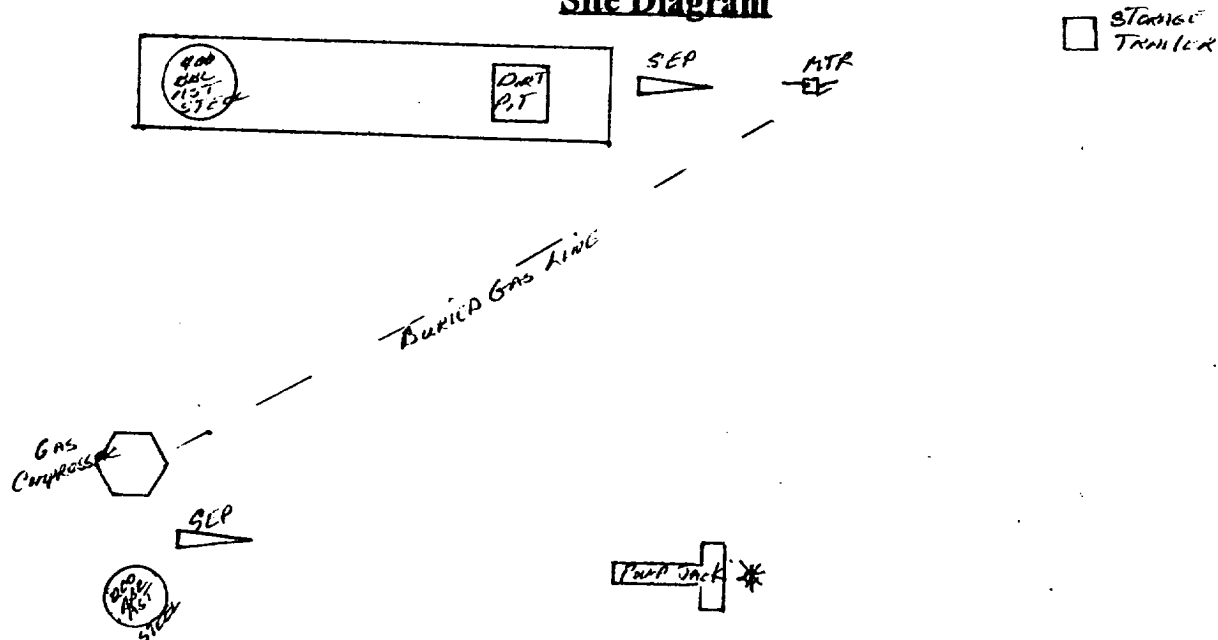
West wall: _____

Land farm: _____

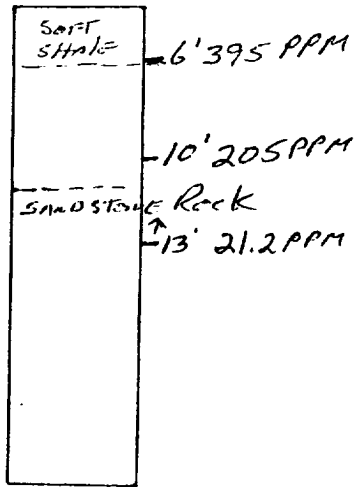
Equipment used: P.S.D PID EXCAVATOR JAMES KIRBY LIND WILSON

Remarks: H.T Rock AT 13' PRACTICAL EXTENT @ SAMPLE MW33-300 P.T.FLOOR
21.2 PPM Sample MW33-301 4 WALL COMP 23.2 PPM.

Site Diagram

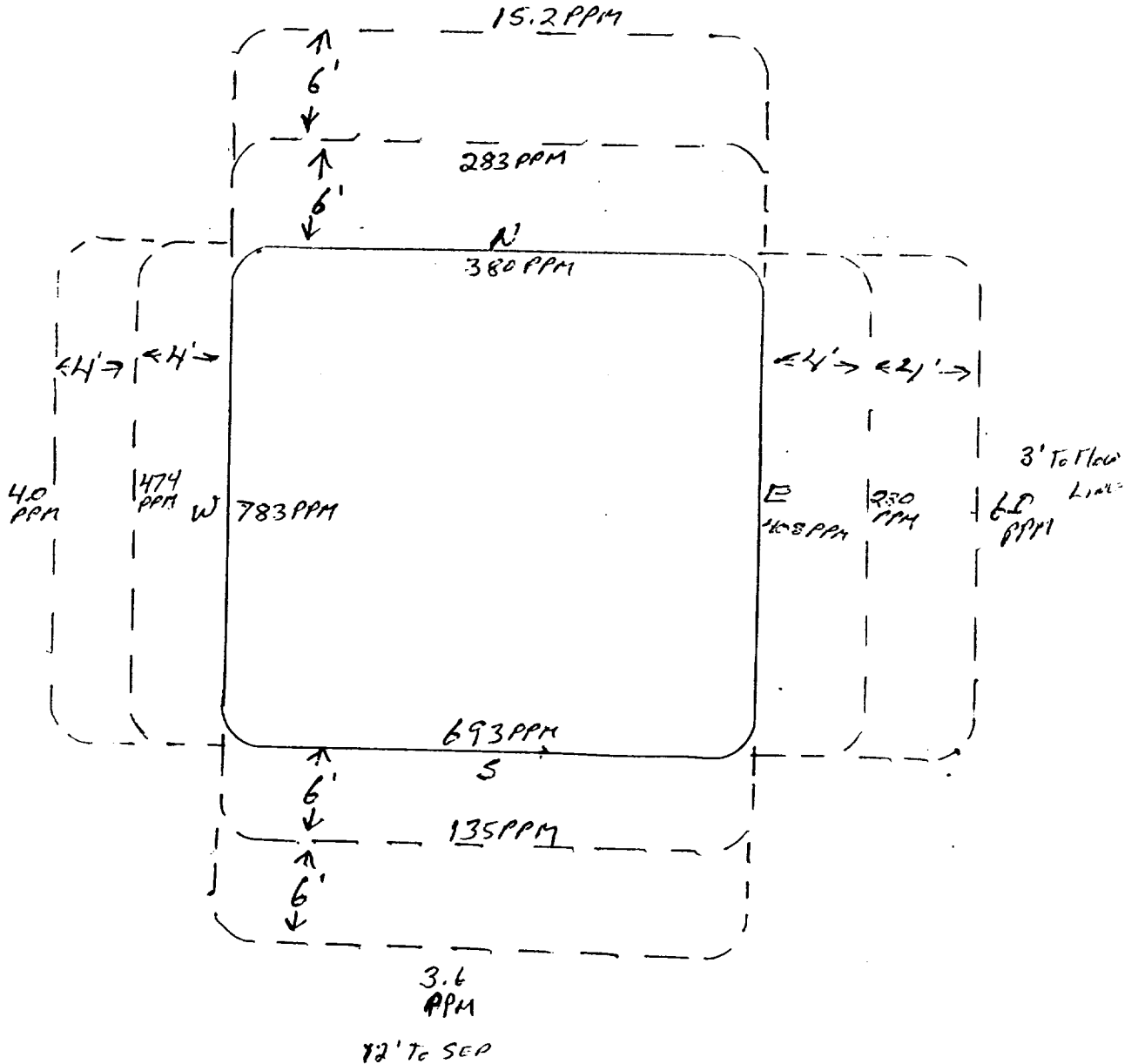


VERT
Samples



PIT Floor MW 33-300 21.2 PPM

PIT 4 wall Comp MW 33-301 23.2 PPM 15' To STORAGE TANK



434

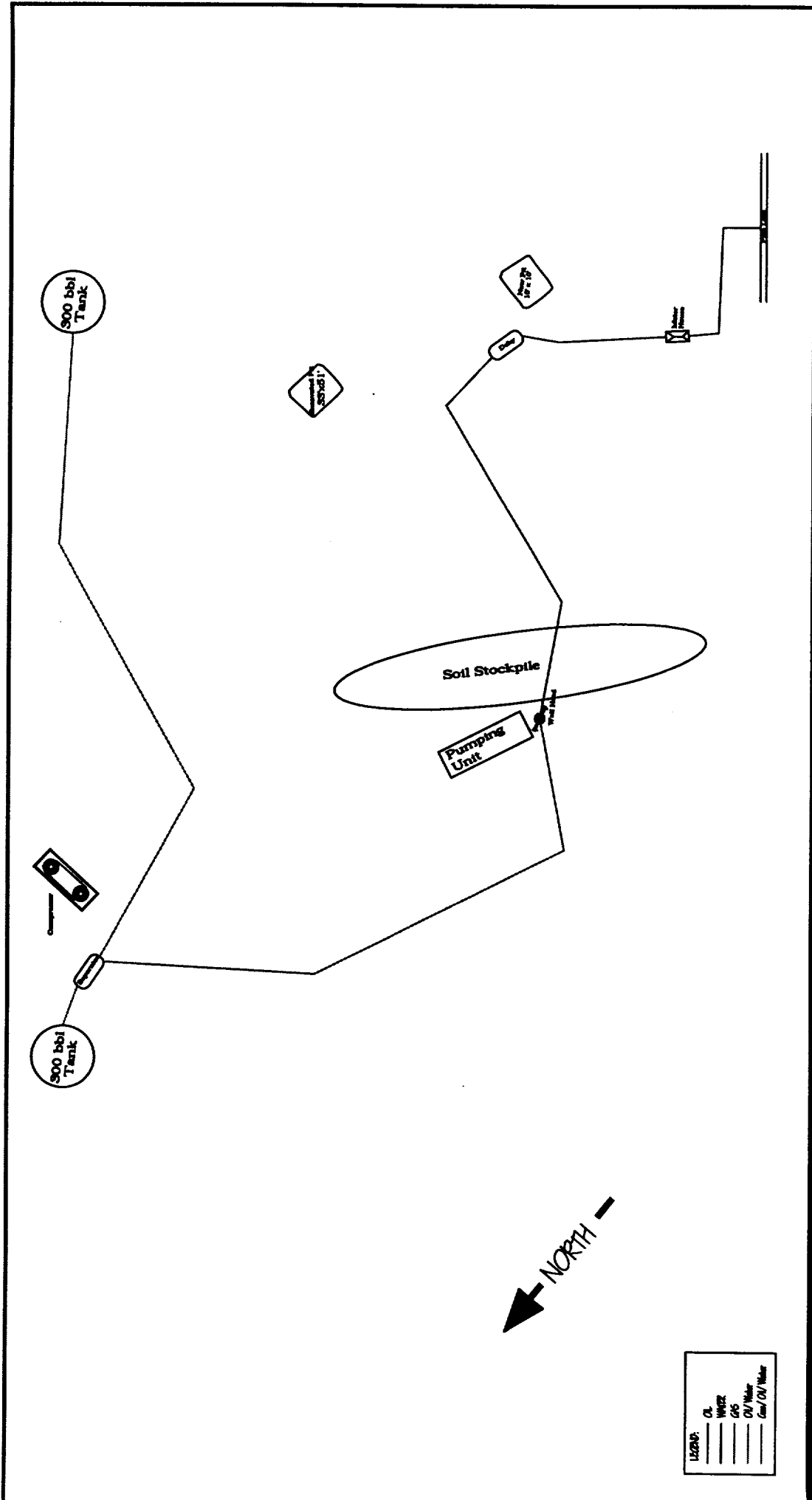


ON SITE
TECHNOLOGIES, LTD.

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

[illegible]

Distribution:	White – On Site	Yellow – LAB	Pink – Sampler	Goldenrod – Client
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Legend:	OL
	Water
	Gas
	Oil/Water
	Gas/Oil/Water

Field Data Recorded : _____ Date: _____

Reviewed : _____ Date: _____

Drawn : _____ Date: _____

SW/SW Sec. 16, T23N, R4W

Elm Ridge Resources

Martin Whittaker 33

Rio Arriba County, NM

Contract Environmental Services, Inc.

505-325-1198

Farmington, New Mexico

Elm Ridge Resources

Risk Analysis

Prepared by:

Contract Environmental Services, Inc.

Prepared for:

Oil Conservation Division - District III

Jicarilla Apache Tribe - EPO

Date: 11/24/98

Location: Martin Whittaker # 33 Separator Pit

SW / SW, Sec 05, T23N, R2W

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 sandstone bedrock at 13' 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)	
MW33- 300	13'	21.2	Gas = 0.2 Die = 120	Pit Bottom
MW33- 301	13'	23.2	Gas = 0.26 Die = 49	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

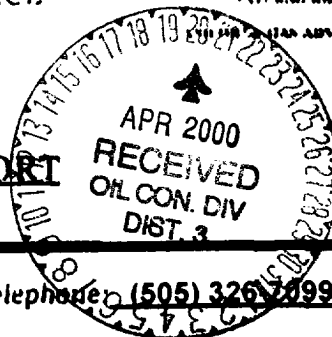
Contract Environmental Services, Inc.
Post Office Box 3376
Farmington, New Mexico 87499

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.

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

U.S. DEPT. OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
NATIONAL SYSTEM OF PUBLIC LANDS

ON-SITE SOIL REMEDIATION REPORT



Operator: Elm Ridge Resources Telephone: (505) 326-7899

Address: 312 W La Plata, Farmington NM 87401

Facility or Well Name: Martin Whittaker #33

Location: Unit or Qtr/Qtr Sec SW/SW Sec 16 T 23N R 4W County Rio Arriba

Land Type: Jicarilla Range

Date Remediation Started: 8-26-98 Date Completed: 8-12-99

Remediation Method: Landfarmed X Approx. cubic yards 603

Composted

Other

Depth To Groundwater: (pts.) 0

Distance To an Ephemeral Stream: (pts.) 10

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

Wellhead Protection Area: (pts.) 0

Distance To Surface Water: (pts.) 0

Final Closure Sampling:

Sampling Date: 8-12-99 Time: 1402

Sample Results:

Field Headspace (ppm) 0.9

TPH (ppm) GRND Method 8015
DDO 760

Other

RANKING SCORE (TOTAL POINTS): 10

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 [Signature] 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: 20-Aug-99

Client:	Elm Ridge Resources, Inc.	Client Sample Info:	Elm Ridge Resources
Work Order:	9908035	Client Sample ID:	MW #33 Landfarm
Lab ID:	9908035-06A	Matrix:	SOIL
Project:	Elm Ridge Landfarms	Collection Date:	08/12/1999 2:02:00 PM
		COC Record:	10246

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	760	25		mg/Kg	1	08/17/1999
GASOLINE RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	08/13/1999

Qualifiers:

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1 of 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Location : <u>Martin Whittaker # 33</u>																																								
Quad : <u>SW/5W</u> Section : <u>16</u>																																								
Township: <u>23N</u> Range: <u>4W</u>																																								
Pit: <u>Separator</u> Reference: Size : <u>100' x 55' x 1</u> <u>120' x 90' x 1</u> Yds: <u>603</u> 3-5 - 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>0.9</td></tr> <tr><td>2</td><td>1-2</td><td>0.0</td></tr> <tr><td>3</td><td>1-3</td><td>0.8</td></tr> <tr><td>4</td><td></td><td></td></tr> <tr><td>5</td><td></td><td></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	0.9	2	1-2	0.0	3	1-3	0.8	4			5			6			7			8			9			10			11			12		
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Overview of Landfarm and Sampling:																																								
Comments: <u>Sandy loamy, no odor or staining, sample depth 8"-12"</u>																																								
Environmental Specialist:																																								