



OK

DEC - 2 1997

~~PH~~ REMEDIATION AND CLOSURE REPORT

APPROVED

Land Type: _____

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

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 8/20/98 Date Completed: 8/20/98

Remediation Method: Excavation X Approx. cubic yards 230 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
EXCAVATOR, SPREAD ON LOCATION IN SOIL FARM

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit: Sample location Pit Bottoms Center 4 BANKS N,S,E,W
Closure Sampling: GAS ND PPM
(if multiple samples, DIE ND PPM
attach sample results Method 8015m
and diagram of sample 1.2 PID PPM
locations and depths) Sample depth 10'
Sample date 8/20/98 Sample time 9:20am

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>3.2 PPM</u>	Ethylbenzene (ppb)	<u>N/A</u>
TPH <u>8015m</u> (ppm)	<u>GAS ND PPM</u>	Total Xylenes (ppb)	<u>N/A</u>
	<u>DIE ND 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 11/23/98 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) _____

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

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

SUBMIT COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: _____ **Telephone:** _____

Address: _____

Facility or Well Name: _____

Location: Unit or Qtr/Qtr Sec _____ Sec _____ T _____ R _____ County _____

Land Type: _____

Date Remediation Started: _____ **Date Completed:** _____

Remediation Method: Landfarmed _____ Approx. cubic yards _____

Composted _____

Other _____

Depth To Groundwater: (pts.) _____

Distance to an Ephemeral Stream (pts.) _____

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

Wellhead Protection Area: (pts.) _____

Distance To Surface Water: (pts.) _____

Final Closure Sampling:

Sampling Date: _____ **Time:** _____

Sample Results:

Field Headspace (ppm) _____

TPH (ppm) _____ **Method** _____

Other _____

RANKING SCORE (TOTAL POINTS): _____

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

DATE _____ **PRINTED NAME** _____

SIGNATURE _____ **AND TITLE** _____

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: 03-Sep-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Martin Whittaker No.29
Work Order:	9808048	Client Sample ID:	MW29-200 Pit Floor
Lab ID:	9808048-01A	Matrix:	SOIL
Project:	Martin Whittaker No.29	Collection Date:	8/20/98 9:20:00 AM
		COC Record:	4390

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	8/27/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	8/24/98

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 Based on EPA Method 8260 and 8210

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 03-Sep-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Martin Whittaker No.29
Work Order:	9808048	Client Sample ID:	MW29-201 Wall Com
Lab ID:	9808048-02A	Matrix:	SOIL
Project:	Martin Whittaker No.29	Collection Date:	8/20/98 9:25:00 AM
		COC Record:	4390

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	8/27/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	8/24/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

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Surr: - Surrogate

1 of 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

CONTRACT ENVIRONMENTAL

Daily Site Sheet

Site Name: Martin With Harker No 29

Date: 8-20-98

Time Started: 7:35

Time Finished: 9:30

Pit starting size: 20x20x4

Pit size when finished: 24x26x10

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: _____

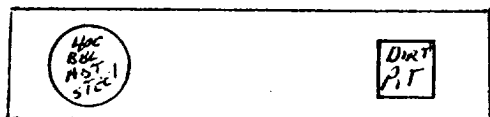
West wall: _____

Land farm: _____

Equipment used: P.S.D PID TRACKHOE JAMES KIRBY LINDA WILSON

Remarks: Took Two Samples 1 4-2 TAR P.T FLOOR 3.2 P.P.M
1 4-2 TAR 4 WALL Composite 1.2 PPM
10' DEEP HIT SHALE CLEAN UP RICE

Site Diagram



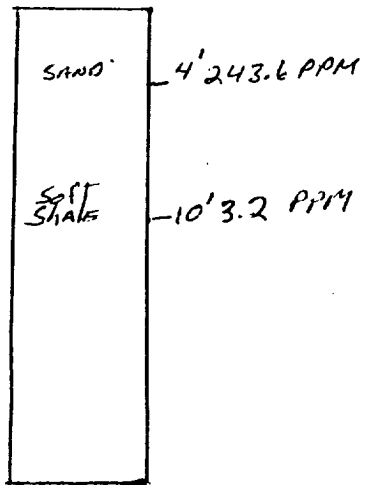
SEP.

HTR

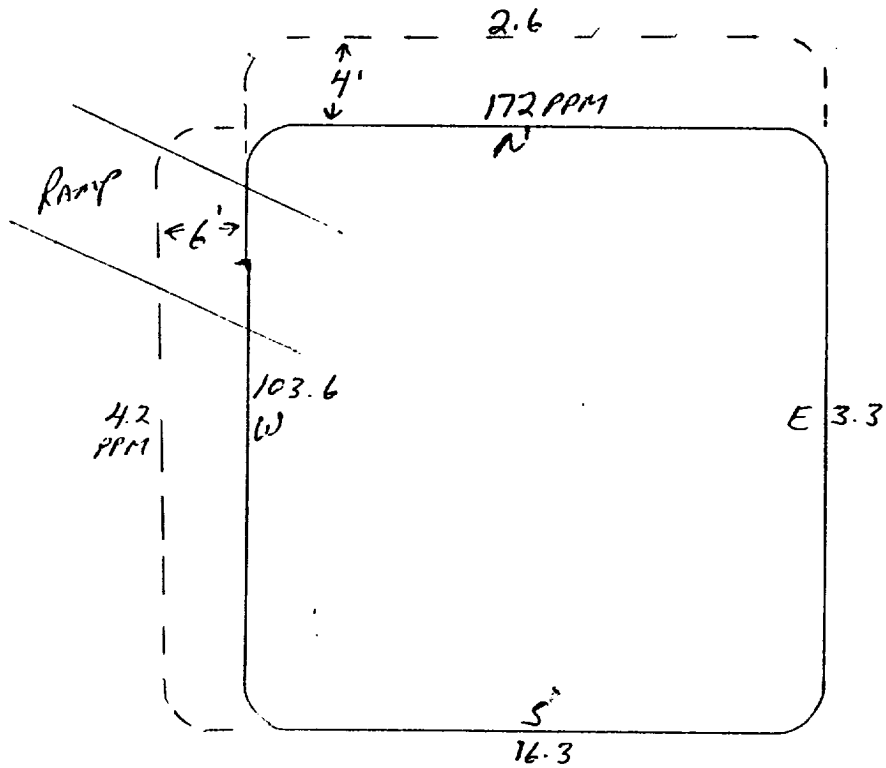
PUMP JACK

WELL HEAD

VERT
Samples



Pit Floor Sample MW 29-200 3.2 PPM
4 Wall Composite MW 29-201 1.2 PPM

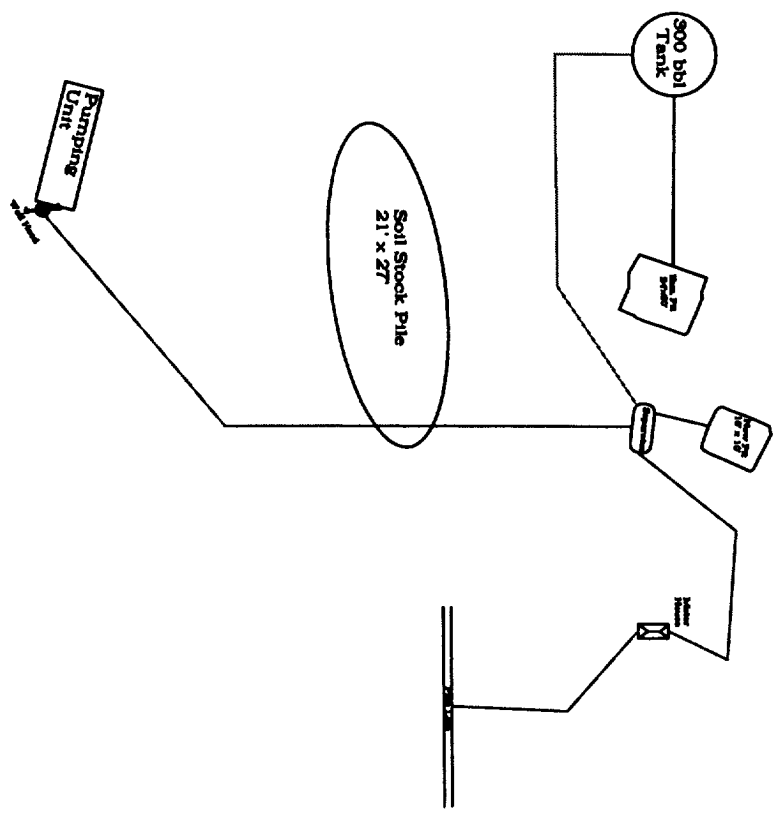
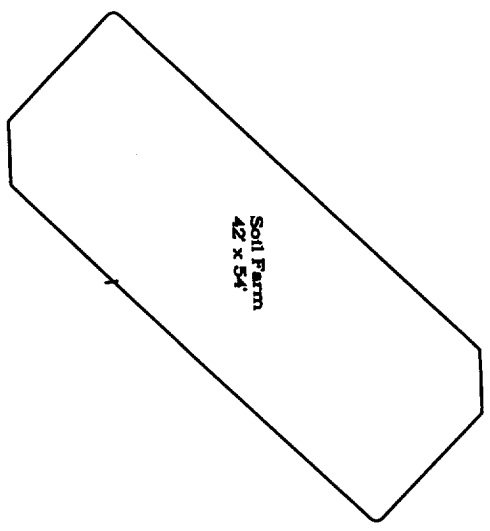


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Distribution: White – On Site	Yellow – LAB	Pink – Sampler	Goldenrod – Client
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U200: _____
 A _____
 W200 _____
 G5 _____
 O1/Water _____
 Gnd/O1/Water _____

Field Data Recorded : _____ Date: _____
 Reviewed : _____ Date: _____
 Drawn : _____ Date: _____

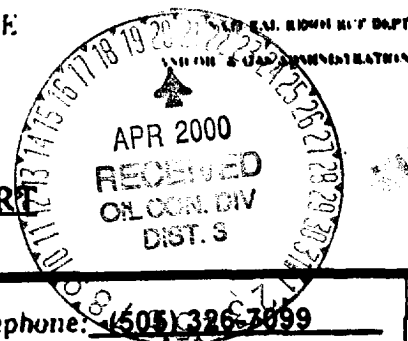


Elm Ridge Resources
 Martin Whittaker 29
 SW/SW Sec. 15, T23N, R4W
 Rio Arriba County, NM

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

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

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 #29

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

Land Type: Jicarilla Range

Date Remediation Started: 8-20-98

Date Completed: 8-25-99

Remediation Method: Landfirmed X

Approx. cubic yards 200

Composted ---

Other ---

Depth To Groundwater: (pts.) 0

Distance to an Ephemeral Stream (pts.) 0

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: 8-25-99 Time 0935

Sample Results:

Field Headspace (ppm) 2.0

TPH (ppm) GRND Method 8015
ORO NO

Other ---

RANKING SCORE (TOTAL POINTS): 0

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: 16-Sep-99

Client:	Elm Ridge Resources, Inc.	Client Sample Info:	Elm Ridge Landfarms
Work Order:	9908055	Client Sample ID:	MW#29 Landfarm 1-2
Lab ID:	9908055-11A	Matrix:	SOIL
Project:	Elm Ridge Landfarms	Collection Date:	08/25/1999 9:35:00 AM
		COC Record:	10252

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	09/02/1999
GASOLINE RANGE ORGANICS		SW8015B				Analyst: DM
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	08/31/1999

Qualifiers:

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

1 of 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Location : <u>Martin Whittaker # 29</u> Quad : <u>SW/SW</u> Section : <u>15</u> Township : <u>23N</u> Range : <u>4W</u> Pit : <u>Separator</u> Reference : <u>120' N 20° E</u> Size : <u>90' x 60' x 1</u> Yds : <u>200</u> <u>2-5</u> - Point Composite		Overview of Landfarm and Sampling :																																						
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 15%;">Sample #</th><th style="width: 25%;">Location</th><th style="width: 20%;">OVM</th></tr></thead><tbody><tr><td>1</td><td>1-1</td><td>1.4</td></tr><tr><td>2</td><td>1-2</td><td>2.0</td></tr><tr><td>3</td><td></td><td></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	1.4	2	1-2	2.0	3			4			5			6			7			8			9			10			11			12		
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Comments : <u>Sandy loam, light brown grey, no odor or staining, covered with vegetation.</u> <u>sample taken a 8' to 12"</u>																																								
Environmental Specialist :																																								