

Date Remediation Started: 9/8/98 Date Completed: 9/9/98

Remediation Method: Excavation X Approx. cubic yards 220 C.Y.

(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 Bottom - CENTER 4 BANKS N,S,E,W

Closure Sampling:

(if multiple samples,

attach sample results

and diagram of sample

locations and depths)

Sample depth 19'

Sample date 9/9/98

Sample time 10:40 AM

GAS ND PPM

DIE ND PPM

METHOD: BOISM

PID = 4.3 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) 13.2 Ethylbenzene (ppb) N/A

TPH BOISM (ppm) GAS ND PPM Total Xylenes (ppb) N/A

DIE ND 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 11/25/98 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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 25-Sep-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	MW18
Work Order:	9809023	Client Sample ID:	MW18-102 Pit Floor
Lab ID:	9809023-03A	Matrix:	SOIL
Project:	Martin Whittaker	Collection Date:	9/9/98 10:40:00 AM
		COC Record:	5212

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	9/21/98
GASOLINE RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	9/18/98

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BEYOND BORDERS with our People and Services

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 25-Sep-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	MW18
Work Order:	9809023	Client Sample ID:	MW18-103 4 Wall Comp.
Lab ID:	9809023-04A	Matrix:	SOIL
Project:	Martin Whittaker	Collection Date:	9/9/98 10:45:00 AM
		COC Record:	5212

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	9/21/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	9/18/98

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- TECHNOLOGY BLENDING: Proprietary and Confidential - For Internal Use Only

Site Diagram

Sample No.

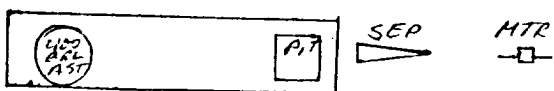
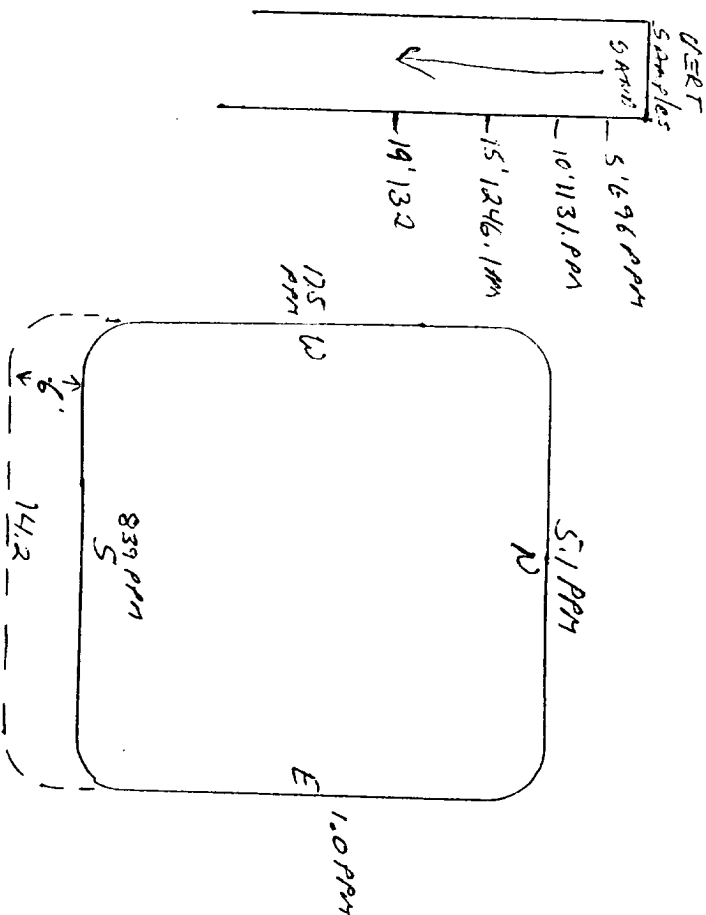
Description

Site Name: Mach's 224th St - CR 111-16

1) M218-102
2) M218-103

9.7 Floor
42011 Corp

PID: OPAD
13.2 PPM
4.3 PPM



Pump Jack *



CHAIN OF CUSTODY RECORD

5212

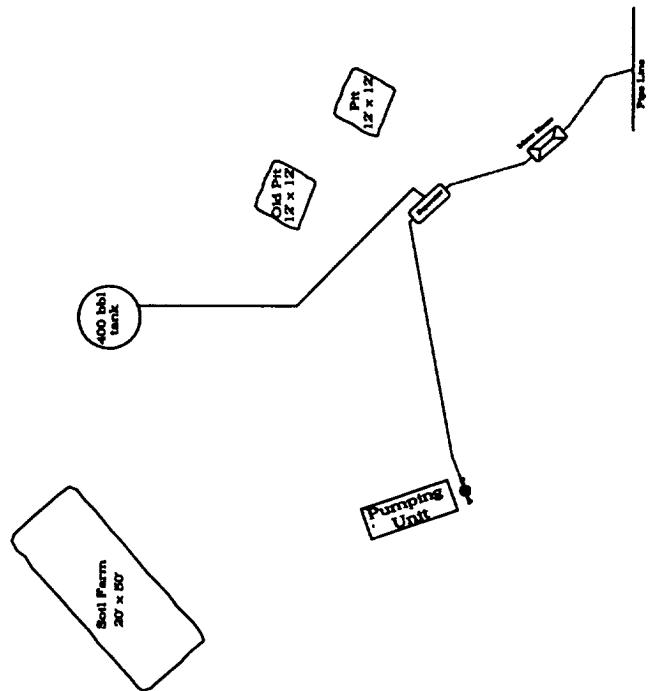
Page 1 of 1

Date: 9/11/98

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

Purchase Order No.:		Job No.		Name		Title	
SEND INVOICE TO		Company		Company		Company	
Address		Address		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>Multix, MW24MLD, MW24, MW24MLD1, MW24MLD2, MW37</u>				ANALYSIS REQUESTED			
Sampler: <u>LRW</u>				LAB ID			
SAMPLE IDENTIFICATION		SAMPLE DATE		MATRIX		PRES.	
MW24-100 P.1 Floor		7/7/98		Soil		1.0	
MW24-101 P.1 Floor		11/20/95				1.2	
MW24-102 P.1 Floor		11/20/95				13.2	
MW24-103 P.1 Floor		11/20/95				4.3	
MW24-200 P.1 Floor		7/10/98				3.6	
MW24-201 P.1 Floor		10/20				1.0	
MW24-202 P.1 Floor		11/10				3.3	
MW24-203 P.1 Floor		11/05				1.3	
MW24-204 P.1 Floor		11/50				54.0	
MW24-205 P.1 Floor		11/55				5.6	
MW24-206 P.1 Floor		3:45				3.0	
MW24-207 P.1 Floor		3:50				2.7	
Relinquished by:		Date/Time		Received by:		Date/Time	
Relinquished by:		Date/Time		Received by:		Date/Time	
Relinquished by:		Date/Time		Received by:		Date/Time	
Method of Shipment:		Rush		24-48 Hours		10 Working Days	
Authorized by:		Date		STD		Special Instructions:	

LEGEND	
CL	
Water	
Gas	
Oil Water	
Gas/Oil Water	



NOTE: CONNECTED SPEND INSTRUCTIONS ARE APPROXIMATE
FOR ESTIMATING PURPOSES ONLY. ACTUAL LINES
FOR ESTIMATING PURPOSES ONLY. ACTUAL LINES
A QUALIFIED TECHNICIAN

Field Data Recorded : Date: 9/02/98
Reviewed : Date:
Drawn : bla Date: 9/28/98

Elm Ridge Resources
Martin Whittaker #18

NE of NE Sec. 7, 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 RESOURCE DEPT
AND 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 #18

Location: Unit or Qtr/Qtr Sec NE/NE Sec 07 T 23W R 4W County Rio Arriba

Land Type: Jicarilla Range

Date Remediation Started: 9-8-98 Date Completed: 8-24-99

Remediation Method: Landfarmed X Approx. cubic yards 220
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

RANKING SCORE (TOTAL POINTS): 0

Final Closure Sampling:

Sampling Date: 8-24-99 Time 0945

Sample Results:

Field Headspace (ppm) 0.7

TPH (ppm) GROUND Method 8015

Other DRO 52

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:	9908054	Client Sample ID:	MW #18 LF 1-1
Lab ID:	9908054-07A	Matrix:	SOIL
Project:	Elm Ridge Landfarms	Collection Date:	08/24/1999 9:45:00 AM
		COC Record:	10251

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	52	25		mg/Kg	1	09/01/1999
GASOLINE RANGE ORGANICS		SW8015B				Analyst: DM
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	08/26/1999

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