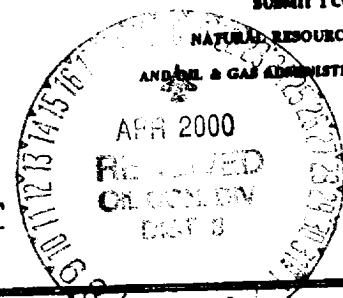


JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

PIT REMEDIATION AND CLOSURE REPORT



SUBMIT 1 COPY TO

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

Operator: Elm Ridge Resources Telephone: (505) 326-7099
Address: 312 W La Plata Farmington NM 87401
Facility or Well Name: Jicarilla Apache I # 5
Location: Unit or Qtr/Qtr 1750FNL Sec 14 T 23N R 3W County Rio Arriba
Pit Type: Separator X Dhydrator Other
Land Type: Range

Pit Location: Pit dimensions: length 31', width 27', depth 7'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 99'
Direction from reference: 20 Degrees East of North
X West South X

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or: less than 1000 feet from all other water sources)	Yes (20 points) No (0 points)	<u>0</u>
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)	<u>0</u>

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 9-14-99

Remediation Method: Excavation _____
(Check all appropriate sections) Landfarmed X Approx. cubic yards 217
Insitu Bioremediation _____
Other _____

Remediation Location: Onsite X Offsite _____
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavation

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit: Sample location Pit bottom @8' 4 point comosite of walls
Closure Sampling: Walls BTEX ND TPH ND
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 8' pit bottom
Sample date 9-14-99 Sample time 1230

Sample Results

Soil: Benzene	(ppm)	<u>ND</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>ND</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>0.0</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>ND</u>	Total Xylenes	(ppb)	_____

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 KNOWLEGE AND BELIEF

DATE 9-23-99 PRINTED NAME Bill Schaaphok
SIGNATURE Bill Schaaphok AND TITLE Environmental Specialist

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE 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: 22-Sep-99

Client:	Elm Ridge Resources, Inc.	Client Sample Info:	Jicarilla Apache I #5
Work Order:	9909053	Client Sample ID:	Sep Pit Bottom @ 8ft
Lab ID:	9909053-05A	Matrix:	SOIL
Project:	Elm Ridge Landfarms	Collection Date:	9/14/99 12:55:00 PM
		COC Record:	10319

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	9/20/99
GASOLINE RANGE ORGANICS		SW8015B				Analyst: DM
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	9/16/99
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	ND	1		µg/Kg	1	9/15/99
Toluene	ND	2		µg/Kg	1	9/15/99
Ethylbenzene	ND	1		µg/Kg	1	9/15/99
m,p-Xylene	ND	2		µg/Kg	1	9/15/99
o-Xylene	ND	1		µg/Kg	1	9/15/99

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 ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 22-Sep-99

Client:	Elm Ridge Resources, Inc.	Client Sample Info:	Jicarilla Apache I #5
Work Order:	9909053	Client Sample ID:	Sep Pit Walls
Lab ID:	9909053-04A	Matrix:	SOIL
Project:	Elm Ridge Landfarms	Collection Date:	9/14/99 12:30:00 PM
		COC Record:	10319

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	9/20/99
GASOLINE RANGE ORGANICS		SW8015B				Analyst: DM
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	9/16/99
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	ND	1		µg/Kg	1	9/15/99
Toluene	ND	2		µg/Kg	1	9/15/99
Ethylbenzene	ND	1		µg/Kg	1	9/15/99
m,p-Xylene	ND	2		µg/Kg	1	9/15/99
o-Xylene	ND	1		µg/Kg	1	9/15/99

Qualifiers:

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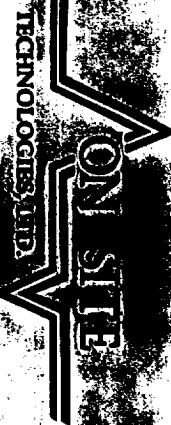
Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Location : Jicarilla Apache I #5		Overview of Location and Sampling :																																								
Quad : 1750'FNL Section : 14 1750' FEL		Range : Township: 23N																																								
Pit : Separator Reference : 99' S20W Initial Size : unavailable Final Size : 31'x27'x7' Yds. Excavated : 217		<div style="text-align: center;"> </div> <div style="text-align: center;"> </div>																																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Sample #</th> <th style="width: 35%;">Location</th> <th style="width: 50%;">OVM</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BTMG7'</td> <td>0</td> </tr> <tr> <td>2</td> <td>4valcomp</td> <td>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	BTMG7'	0	2	4valcomp	0	3			4			5			6			7			8			9			10			11			12			<div style="text-align: center;"> Wellhead </div> <div style="text-align: center;"> </div>	
Sample #	Location	OVM																																								
1	BTMG7'	0																																								
2	4valcomp	0																																								
3																																										
4																																										
5																																										
6																																										
7																																										
8																																										
9																																										
10																																										
11																																										
12																																										
Depth to Groundwater: >100' Nearst Water Source: >1000' Nearst Surface Water: >1000' NMOC Ranking Score: 0 TPH Closure Standard: 5000		Pit Profile : East to West :																																								
Comments : Pit was excavated prior to sampling (date unknown) Submitted samples were taken 12" into bottom and 12" into walls All samples were submitted for TPH method 8015 and BTEX 8020		<div style="text-align: center;"> </div>																																								
Pit Profile : North to South :		<div style="text-align: center;"> </div>																																								
<div style="text-align: center;"> </div>		<div style="text-align: center;"> </div>																																								
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312E Murray Dr. • P.O. Box 2606 • Farmington, NM 87409
LAB: (505) 325-5867 • FAX: (505) 327-1496

CHAIN OF CUSTODY RECORD

10319

Date: _____

Purchase Order No.:

Project No.:

SEND INVOICE TO

Name: B. Schmitt
Company: Environmental Services Dept.:
Address: 312 E. 1st St.
City, State, Zip: Farmington NM 87401

PROJECT LOCATION:

SAMPLER'S SIGNATURE: [Signature]

SAMPLE IDENTIFICATION

DATE	TIME	MATRIX	PRES.
------	------	--------	-------

Number of Containers

REPORT RESULTS TO

Name: _____
Company: _____
Mailing Address: _____
City, State, Zip: _____
Telephone No.: _____
Telefax No.: _____

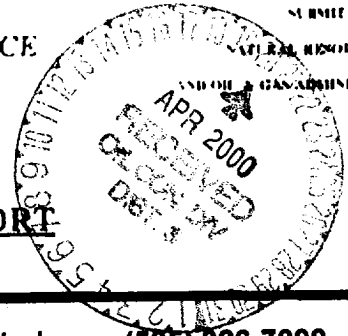
ANALYSIS REQUESTED

LAB ID

SAMPLE IDENTIFICATION	SAMPLE			Number of Containers	ANALYSIS REQUESTED				LAB ID
	DATE	TIME	MATRIX						
ML # 57 Lead/Feas. Dehydrat	9-14-95	1500	Soil	1	✓	✓	✓	✓	
Jic Apache I #6 Sep. P. + B. H.	9-14-95	1330	Soil	1	✓	✓	✓	✓	
Jic Apache I #6 Sep. P. + Wells	9-14-95	1305	Soil	1	✓	✓	✓	✓	
Jic Apache I #5 Sep. P. + Wells	9-14-95	1230	Soil	1	✓	✓	✓	✓	
Jic Apache I #5 Sep. P. + B. H.	9-14-95	1255	Soil	1	✓	✓	✓	✓	
Jic I #4 Lindheim L-1	9-14-95	1230	Soil	1	✓	✓	✓	✓	
Relinquished by: <u>[Signature]</u>	Date/Time: <u>9-14-95</u>			Received by: <u>[Signature]</u>					Date/Time: <u>9-14-95</u>
Relinquished by: _____	Date/Time: _____			Received by: _____					Date/Time: _____
Method of Spillage: _____	Date/Time: _____			Received by: _____					Date/Time: _____
Authorized by: _____	Date: <u>9-14-95</u>			Received by: _____					Date/Time: _____

Special Instructions / Remarks:

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



STANDARD COPY TO

NATIONAL RESOURCE DEPT

INDIAN LAND 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: Jicarilla Apache I #5

Location: Unit or Qtr/Qtr Sec 1750' FNL Sec 14 T 23N R 3W County Rio Arriba

Land Type: Jicarilla Range

Date Remediation Started: _____

Date Completed: 8-24-99

Remediation Method: Landfirmed X

Approx. cubic yards 230

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: 8-24-99 Time 1236

Sample Results:

Field Headspace (ppm) 12.3

TPH (ppm) GROUND Method 8015
DRO 2250

Other _____

RANKING SCORE (TOTAL POINTS): 60

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:	9908052	Client Sample ID:	Jic. Apache I #5 Landfarm 1-2
Lab ID:	9908052-02A	Matrix:	SOIL
Project:	Elm Ridge Landfarms	Collection Date:	8/23/99 12:36:00 PM
		COC Record:	10250

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	2250	25		mg/Kg	1	8/30/99
GASOLINE RANGE ORGANICS		SW8015B				Analyst: DM
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	8/25/99

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 ENVIRONMENT -

Location: Jicarilla Apache I #5

1750' FNL

Quad: 1750' FEL Section: 14

Township: 23N Range: 3W

Pit: Separator

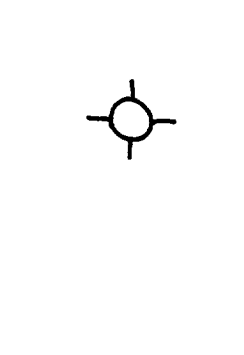
Reference: 135' S 20° W

Size: 90' x 69' x 1'

Yds: 230

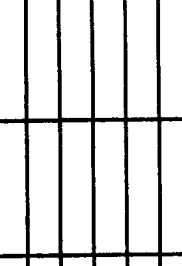
2-5 - Point Composite

Sample #	Location	OVM
1	1-1	6.9
2	1-2	12.3
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		



90'

69'



Comments: Sandy brown grey/brown, no odor slight staining in Northwest corner, overgrown with vegetation sample taken at 8" to 12"

Environmental Specialist: