

RECEIVED
JUN 24 1999

OIL CON. DIV.
DIST. 3

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

OK Risk
Sandston
ENTERED
9/13/96
Deputy Oil & Gas Inspector
AUG 09 1999
NATURAL RESOURCES ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

Approved

Operator: BURLINGTON RESOURCES Telephone: (505) 326-9700

Address: P.O. BOX 4289, FARMINGTON, NM 87499-4289

Facility or Well Name: Hicarilla 96 #10 DP# 29238A

Location: Unit or Qtr/Qtr Sec I Sec 11 T 26 R 03 County Rio Arriba

Pit Type: Separator Dehydrator Other

Land Type: Hicarilla Apache

Pit Location: Pit dimensions: length 13', width 12', depth 2'

Reference: wellhead X, other

Footage from reference: 63'

Direction from reference: 100° Degrees East North X
West South

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) 20

Distance to an Ephemeral Stream

(Downgradient dry wash greater than
one foot in width)

Less than 100 feet (10 points)
Greater than 100 feet (0 points) 0

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) 0

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or: less than
100 feet from all other water sources)

Yes (20 points)
No (0 points) 0

Distance To Surface Water:

(Vertical distance to perennial
streams, rivers, creeks,
ponds, irrigation canals and ditches)

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

Date Remediation Started: 8-22-96 Date Completed: _____

Remediation Method: Excavation ☒ Approx. cubic yards 81

(Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____

Other _____

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

General Description of Remedial Action: Excavated contaminated material

Groundwater Encountered: No ☒ Yes _____ Depth _____

Final Pit: Sample location See pit closure verification sheet
Closure Sampling: Sheet
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 8 Ft
Sample date 8-22-96 Sample time 0900

Sample Results

Soil: Benzene (ppm)	<u>50.25</u>	Water: Benzene (ppb)	_____
Total BTEX (ppm)	<u>55.5</u>	Toluene (ppb)	_____
Field Headspace (ppm)	<u>558</u>	Ethylbenzene (ppb)	_____
TPH (ppm)	<u>1240</u>	Total Xylenes (ppb)	_____

Groundwater Sample: Yes _____ No ☒ (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 8/22/96 PRINTED NAME Guy L. Garretson

SIGNATURE Guy L. Garretson AND TITLE Lease Operator

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) Spray w/nutrients

SIGNED: Robert J. [Signature] DATE: 9/9/96

PIT CLOSURE VERIFICATION SHEET

Location: Acarilla 96 #10 DP# 29238A Lease No RL # 09-000096
 Contractor: Philips Env Consultant Initials: JWP
 Date Started: 8-22-96 Date Finished:

Excavation & Soil Information

Dimensions (approx.): 16' FT. x 16' FT. x 8.5' FT. Deep Cubic Yards: (bcy) 81
 Soil Remediated ☒ On Site ☐ Off Site If off site name location (s)

PIT PERIMETER	PIT PROFILE

OVM Results:								
Sample ID	1	2	3	4	5	6	7	8
Headspace PID (ppm)	04	50	137	03	410			
Sample ID	9	10	11	12	13	Comp 1	Comp 2	Comp 3
Headspace PID (ppm)						558		

Laboratory Results:			
Sample ID	m6-29238A-2-V		
BTEX RM8020 (ppm)	55.5		
TPH RM8015 (ppm)	1240.0		

Tracility 96 # 10

WORK Permit -

check location with landowner

WORK Permit -

Guy

Jason

James

Tim

Pit 14x14x2

Sample Not

Taken in Middle of pit - low

Spot in pit - Sample Taken

Start Tomorrow - leave 10 @ 4:55 pm

Cover on Leuburn @ 6:45 am

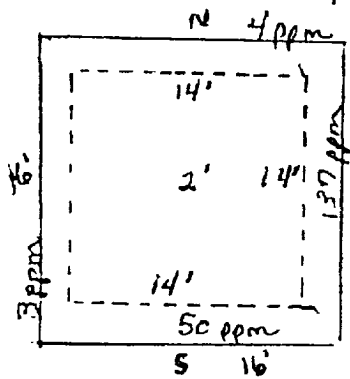
Start Digging @ 7:15 am

Hit Rock 7:45 am

6 1/2 mls from Highway - (J-4) to 10

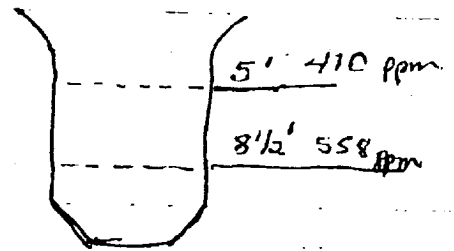
Need to remove piping

Picture #31 @ 7:04 am



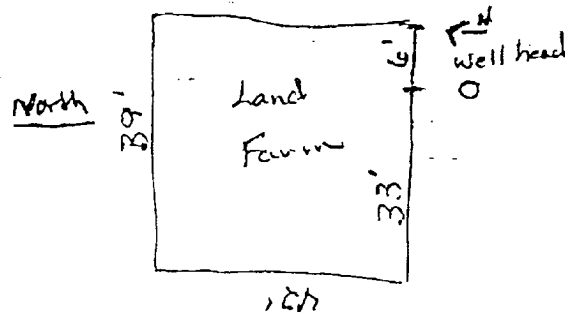
NS EW
16' 16' - 8 1/2'

Composite - 558 ppm
Bottom 410 ppm
Picture * 2 & 3
(30) (22)



8 1/2' - Hit solid Rock - 8 1/2' - East side

Went + Talked to Jince Martinez - Cattleguard & Road



Leave location
@ 9:05 am to
6A - Take top
off per C. Rock

68.9 -

71.8 -

Williams
Land
Farm

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
 CLIENT : PHILIP ENVIRONMENTAL
 PROJECT # : 16256
 PROJECT NAME : MOI PIT REM.

AEN I.D.: 608353

SAMPLE						
ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	M6-29238A-2-V	NON-AQ	8/22/96	8/26/96	8/26/96	1
08	M6-29232A-2-V	NON-AQ	8/22/96	8/26/96	8/27/96	10
09	M6-29151B-2-V	NON-AQ	8/22/96	8/26/96	8/26/96	1
PARAMETER	DET. LIMIT	UNITS	07 ✓	08 ✓	09 ✓	
FUEL HYDROCARBONS, C6-C10	10	MG/KG	550	2700	< 10	
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	510	380	< 5.0	
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	180	110	5.3	
CALCULATED SUM			1200	3200	5.3	
SURROGATE:						
O-TERPHENYL (%)			116	103	84	
SURROGATE LIMITS	(66 - 151)					

CHEMIST NOTES:
 N/A

GAS CHROMATOGRAPHY RESULTS

EST : BTEX, MTBE (EPA 8020)
 CLIENT : PHILIP ENVIRONMENTAL
 PROJECT # : 16256
 PROJECT NAME : MOI PIT REM.

AEN I.D.: 608353

AMPLE			DATE	DATE	DATE	DIL.
. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
07	M6-29238A-2-V	NON-AQ	8/22/96	8/26/96	8/27/96	10
08	M6-29232A-2-V	NON-AQ	8/22/96	8/26/96	8/27/96	10
09	M6-29151B-2-V	NON-AQ	8/22/96	8/26/96	8/27/96	1
PARAMETER	DET. LIMIT		UNITS	07 ✓	08 ✓	09 ✓
BENZENE	0.025		MG/KG	< 0.25	0.57	< 0.025
CHLOROBENZENE	0.025		MG/KG	5.0	12	< 0.025
BROMOBENZENE	0.025		MG/KG	4.5	2.4	< 0.025
AL XYLENES	0.025		MG/KG	46	32	< 0.025
ETHYL-1-BUTYL ETHER	0.13		MG/KG	< 1.3	< 1.3	< 0.13

SURROGATE:

CHLOROFLUOROBENZENE (%)

92

130*

89

SURROGATE LIMITS (65 - 120)

REMARKS:

SURROGATE OUTSIDE CONTROL LIMITS DUE TO MATRIX INTERFERENCE.

JICARILLA APACHE TRIBE
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SUBMIT 1 COPY TO
NATURAL
RESOURCE DEPT
AND OIL GAS
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

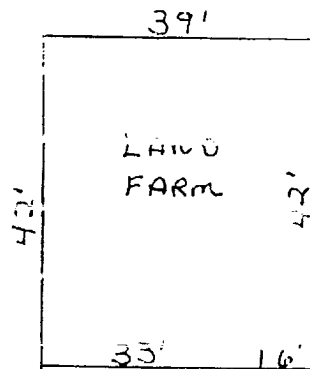
Operator: <u>BUELLINGTON RESOURCES</u>		Telephone: <u>(505) 326-9700</u>	
Address: <u>P.O. BOX 4289, Farmington, NM 87499-4289</u>			
Facility or Well Name: <u>Jicarilla 96 #10</u>			
Location: Unit: <u>I</u> Sec. <u>11</u> T. <u>26</u> N R. <u>03</u> W County <u>Rio Arriba</u>			
Land Type: <u>Jicarilla Apache</u>			
Date Remediation Started: <u>8-22-96</u>		Date Completed: _____	
Remediation Method: Landfilled _____		Approx. cubic yards <u>81</u>	
Composted _____			
Other _____			
Depth to Ground Water: (pts.) <u>20</u>		Final Closure Sampling: Sampling Date: _____ Time _____ Sampling Results: Field Headspace (ppm) _____ TPH (ppm) _____ Method _____ Other _____ Sample No. <u>M6-29238A-</u>	
Distance to an Ephemeral Stream: (pts.) <u>0</u>			
Distance to Nearest Lake, Playa, or Watering Pond: (pts.) <u>0</u>			
Wellhead Protection Area: (pts.) <u>0</u>			
Distance to Surface Water: (pts.) <u>0</u>			
Ranking Score (Total Points): <u>20</u>			
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 APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE			
APPROVED: YES _____ NO _____ (REASON) _____			
SIGNED: _____ DATE: _____			

ON-SITE SOIL REMEDIATION DIAGRAM

↑
N

Location Name: Jicarilla 96*10

WILLIAMS
LAND
FARM



WELL HEAD

Off: (505) 325-5667



LAB: (505) 325-1556

TPH - Gasoline / Diesel Range Organics

Attn: **Craig A. Bock**
 Company: **Burlington Resources**
 Address: **3535 E. 30th Street**
 City, State: **Farmington, NM 87401**

Date: **11-Oct-96**
 COC No.: **C1990**
 Sample No. **12494**
 Job No. **2-1000**

Project Name: **Burlington Resources Jicarilla Pit Closures; Landfarm**
 Project Location: **M6-29238A-2-LF**
 Sampled by: **GG** Date: **8-Oct-96** Time: **14:40**
 Analyzed by: **DC/HR** Date: **10-Oct-96**
 Sample Matrix: **Soil**

Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Gasoline Range Organics (C5 - C9)	< 5.0	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	582.7	mg/kg	5.0	mg/kg
TOTAL	582.7	mg/kg		

Quality Assurance Report

GRO QC No.: 0493-STD

DRO QC No.: 0489-STD

Calibration Check

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Gasoline Range (C5 - C9)	< 5.0	ppb	1,350	1,235	8.5	15%
Diesel Range (C10 - C28)	< 5.0	ppm	100	111	10.8	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	113	111	(70-130)	1	20%
Diesel Range (C10-C28)	116	119	(70-130)	2	20%

Method - SW-846 EPA Method 8215A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *[Signature]*
 Date: **10/11/96**

JICARILLA APACHE TRIBE
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DULCE, NEW MEXICO 87528

ON-SITE SOIL REMEDIATION REPORT

Operator: Taurus Exploration USA Inc. Telephone: (505) 325 - 6800

Address: 2198 Bloomfield Hwy, Farmington N.M. 87401

Facility or Well Name: Jicarilla 96 - 10

Location: Unit or Qtr/Qtr Sec I Sec 11 T 26 N R 3 W County Rio Arriba

Land Type: Range

Date Remediation Started: 8/22/96 Date Completed: 2/3/99

Remediation Method: Landfarmed X Approx. cubic yards 81

Composted

Other

Depth to Groundwater: (pts) 20

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) 20

RANKING SCORE
(TOTAL POINTS): 40

Final Closure Sampling:

Sampling Date: 2/3/99 Time: 12:00

Sample Results:

Field Headspace (ppm) ND

TPH (ppm) <10 Method 8015

Other:

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

DATE: 2/11/99 PRINTED NAME VIRGIL CHAVEZ

SIGNATURE [Signature] AND TITLE ENV. SPECIALIST

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

APPROVED: YES X NO (REASON)

SIGNED: [Signature] DATE: 4-5-99



Inter-Mountain Laboratories, Inc.

Phone (505) 326-4737 Fax (505) 325-4182

2506 West Main Street, Farmington, NM 87401

Client: Energen Resources

Project: Jicarilla 96-10

Sample ID: Landfarm Comp #1

Lab ID: 0399W00711

Matrix: Soil

Condition: Cool/Intact

Date Reported: 02/05/99

Date Sampled: 02/03/99

Date Received: 02/04/99

Date Analyzed: 02/05/99

Parameter	Analytical Result	PQL	Units
METHOD 8015 - GRO			
Gasoline Range Organics	<5	5	mg/Kg
Gasoline Range Organics as Gasoline	<5	5	mg/Kg

Reference: GRO - USEPA Method for Determination of Gasoline Range Organics, Revision 5, February 1992.

WTPH-G Total Petroleum Hydrocarbons Analytical Methods for Soil, Washington State Department of Ecology, Revision 3, October 1991.

Reviewed By:

Sharon Williams, Organic Lab Supervisor



Inter-Mountain Laboratories, Inc.

Phone (505) 326-4737 Fax (505) 325-4182

2506 West Main Street, Farmington, NM 87401

Client: Energen Resources

Project: Jicarilla 96-10

Sample ID: Landfarm Comp #1

Lab ID: 0399W00711

Matrix: Soil

Condition: Cool/Intact

Date Reported: 02/10/99

Date Sampled: 02/03/99

Date Received: 02/04/99

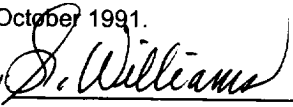
Date Analyzed: 02/05/99

Parameter	Analytical Result	PQL	Units
METHOD 8015 -DRO			
Diesel Range Organics	<5	5	mg/Kg
Diesel Range Organics as Diesel	<5	5	mg/Kg
Quality Control - Surrogate Recovery			
o-Terphenyl(SUR-8015)	88	70 - 130	

Reference: DRO - USEPA Method for Determination of Diesel Range Organics. Revision 2, February 1992.

WTPH-D Total Petroleum Hydrocarbons Analytical Methods for Soil, Washington State Department of Ecology, Revision 3, October 1991.

Reviewed By


Sharon Williams, Organic Lab Supervisor



CHAIN OF CUSTODY RECORD

[illegible]