

DEPUTY OIL & GAS INSPECTOR

MAR 28 1997

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

STUDY COPY 10
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

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

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

Facility or Well Name: Picarilla 96 #7A QPH 29234A

Location: Unit or Qtr/Qtr Sec 00 Sec 01 T 26 R 03 County Rio Arriba

Pit Type: Separator___ Dehydrator___ Other Blow Pit

Land Type: Sycarilla Apache

Pit location: Pit dimensions: length 25', width 24', depth 4'

Reference: wellhead X, other _____

Footage from reference: 96'

Direction from reference: 5° 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)	<u>10</u>
	50 feet to 99 feet	(10 points)	
	Greater than 100 feet	(0 points)	

Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet	(10 points)	<u>0</u>
	Greater than 100 feet	(0 points)	

Distance to Nearest Lake, Playa, or Watering Pond **Less than 100 feet** **(10 points)**
(Downgradient lakes, playas and **Greater than 100 feet** **(0 points)** 0
livestock or wildlife watering ponds)

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) 0

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Distance To Surface Water: **OIL CON. DIST.** **DIST. 3** **Less than 100 feet** (20 points)
Horizontal distance to perennial **100 feet to 1000 feet** (10 points)
lakes, ponds, rivers, streams, creeks, **Greater than 1000 feet** (0 points) 0
irrigation canals and ditches)

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 8-21-96 Date Completed: 11-6-96

Remediation Method: Excavation ☒

(Check all appropriate sections)

Landfarmed ☒

In situ Bioremediation _____

Other Additional CuYd 1860

Remediation Location:

Onsite ☒ Offsite _____

(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavated contaminated

material.

Did not encounter ground

Groundwater Encountered:

No ☒ Yes _____

Depth _____

water during 2nd Excavation

Final Pit:

Sample location See pit closure Verification

Closure Sampling:

(if multiple samples, attach sample results and diagram of sample locations and depths)

Sheet

Sample depth 18 Ft

Sample date 8-21-96

Sample time 1530

Sample Results

Soil: Benzene

(ppm)

0.083 Bottom

0.6008 walls

25.03 Bottom

Water: Benzene

(ppb)

2nd Excavation
Headspace

Total BTEX

(ppm)

0.013 walls

Toluene

(ppb)

Bottom 130 ppm

Field Headspace (ppm)

336

Ethylbenzene

(ppb)

4-wall 15 ppm

TPH

(ppm)

791.8 Bottom

NO walls

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

8-21-96

PRINTED NAME

Guy L. Gaudin

SIGNATURE

[Signature]

AND TITLE

Lead Operator

REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO MARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES ☒ NO _____

(REASON) _____

SIGNED:

[Signature]

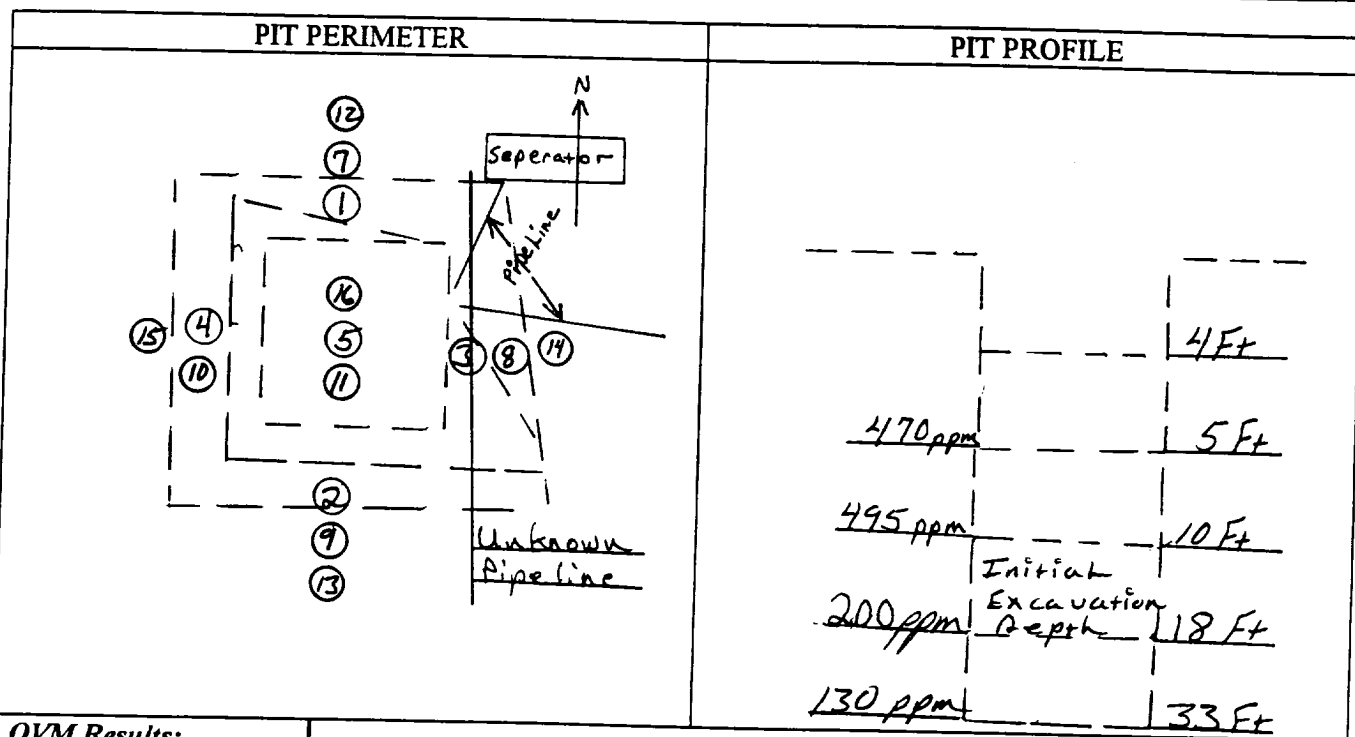
DATE:

10/31/96

BURLINGTON RESOURCES

PIT CLOSURE VERIFICATION SHEET

Location: Acacia 96 #7A DP # 29234A Lease No. BLM #09-000096
 Contractor: Philips Env Consultant Initials: JHP
 Date Started: 8-21-96 Date Finished: 11-6-96
 Additional Excavation 47' x 47' x 33' 1860 cu yd
Excavation & Soil Information
 Dimensions (approx.): 37' FT. x 34' FT. x 18' FT. Deep Cubic Yards: (bcy) 839
 Soil Remediated ☒ On Site ☐ Off Site If off site name location (s) _____



OVM Results:								
Sample ID	1	2	3	4	5	6	7	8
Headspace PID (ppm)	224	35	300	191	200		193	189
Sample ID	9	10	11	12	13	Comp 1	Comp 2	Comp 3
Headspace PID (ppm)	192	193	71	15	10	336	193	Bottom Comp
	14	15	16			4 wall Comp		130
	11	14	130			15		
Laboratory Results:								
Sample ID	M6-29234A-2-V		M6-29234A-3-V		M6-29234A-4-V			
BTEX RM8020 (ppm)			25.05		0.013			
TPH RM8015 (ppm)			791.8		ND			

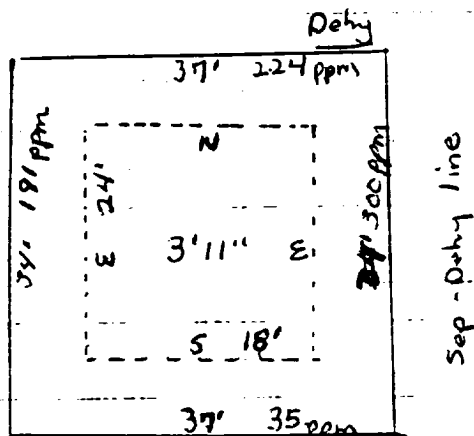
8-21-96
 Jicarilla 96 " 7A
 Work Permit # 96080908330070
 Use line finder - Spot ~~pro~~ B & R lines
 Took 1 hour to Road Hoe to location
 Started Digging at 11:15 am

839

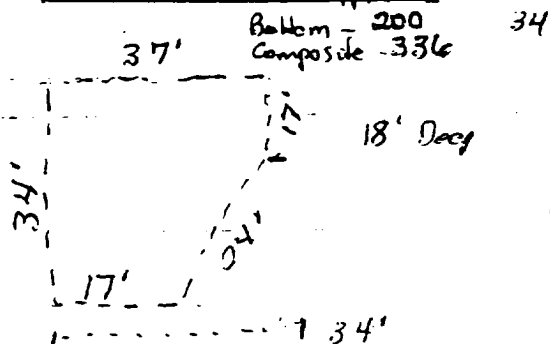
29234A- DP#
 0-1-26N-3W

Guy
 James
 Tim
 Jason

Picture # 3 (29)



5'	470 ppm
10'	495 ppm
15'	549 ppm

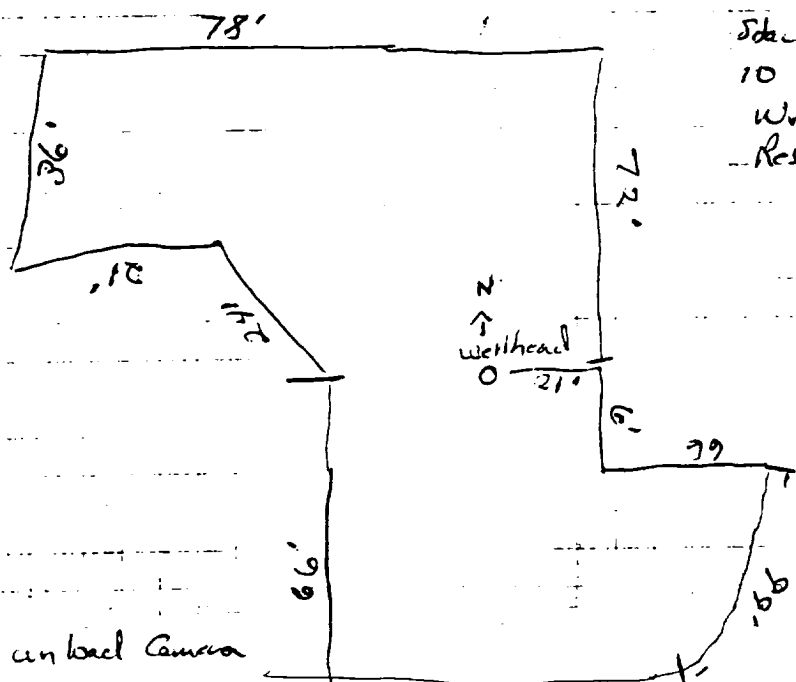


N-224 Dehy
 S-35
 E-300 - Pipeline
 W-191 - Synchro
 B-200
 336 Comp

Hot - Hot.

Finished Digging 3:00 pm
 Call Craig - Move to next location

Picture 201 at 3:40



Start walking Hoe to
 10 @ 3:40 pm
 Wrong Sample at 6A
 Resample

Have Randy unhook Camera

OFF: (505) 325-5667



LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

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

Date: 30-Oct-96
COC No.: C3002
Sample No. 12706
Job No. 2-1000

Project Name: *Meridian Oil, Inc. - Jicarilla 96 #7A*
Project Location: *M6-29234A-4-V; 4 Wall Composite*
Sampled by: JP
Analyzed by: DC
Sample Matrix: *Soil*

Date: 25-Oct-96 Time: 15:45
Date: 29-Oct-96

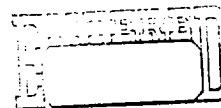
Laboratory Analysis

Parameter	Result	Units of Measure	Detection Limit	Units of Measure
Benzene	0.8	ug/kg	0.2	ug/kg
Toluene	<0.2	ug/kg	0.2	ug/kg
Ethylbenzene	0.8	ug/kg	0.2	ug/kg
m,p-Xylene	8.8	ug/kg	0.2	ug/kg
o-Xylene	2.6	ug/kg	0.2	ug/kg
TOTAL		13.0	ug/kg	

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *10/30/96*

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: **30-Oct-96**
COC No.: **C3002**
Sample No. **12706**
Job No. **2-1000**

Project Name: **Meridian Oil, Inc. - Jicarilla 96 #7A**
Project Location: **M6-29234A-4-V; 4 Wall Composite**
Sampled by: **JP**
Analyzed by: **DC/HR**
Sample Matrix: **Soil**

Date: **25-Oct-96** Time: **15:45**
Date: **29-Oct-96**

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)	< 5.0	mg/kg	5.0	mg/kg
	TOTAL	< 5.0		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)	< 50	ppb	1,350	1,326	1.8	15%
Diesel Range (C10 - C28)	< 5.0	ppm	100	102	1.8	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	107	103	(70-130)	3	20%
Diesel Range (C10-C28)	114	104	(70-130)	6	20%

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: 

Date: **10/30/96**

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: **30-Oct-96**
 COC No.: **C3002**
 Sample No. **12705**
 Job No. **2-1000**

Project Name: **Meridian Oil, Inc. - Jicarilla 96 #7A**
 Project Location: **M6-29234A-3-V; Bottom @ 33'**
 Sampled by: **JP**
 Analyzed by: **DC/HR**
 Sample Matrix: **Soil**

Date: **25-Oct-96** Time: **15:30**
 Date: **29-Oct-96**

Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Gasoline Range Organics (C5 - C9)	646.8	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	144.9	mg/kg	5.0	mg/kg
TOTAL	791.8	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)	<50	ppb	1,350	1,326	1.8	15%
Diesel Range (C10 - C28)	<5.0	ppm	100	102	1.8	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	107	103	(70-130)	3	20%
Diesel Range (C10-C28)	114	104	(70-130)	6	20%

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by:
 Date: **10/30/96**

OFF: (505) 325-5667



LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

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

Date: **30-Oct-96**
COC No.: **C3002**
Sample No. **12705**
Job No. **2-1000**

Project Name: **Meridian Oil, Inc. - Jicarilla 96 #7A**
Project Location: **M6-29234A-3-V: Bottom @ 33'**
Sampled by: **JP**
Analyzed by: **DC**
Sample Matrix: **Soil**

Date: **25-Oct-96** Time: **15:30**
Date: **29-Oct-96**

Laboratory Analysis

Component	Result	Units of Measure	Detection Limit	Units of Measure
Benzene	82.5	ug/kg	0.2	ug/kg
Toluene	2741.8	ug/kg	0.2	ug/kg
Ethylbenzene	1640.3	ug/kg	0.2	ug/kg
m,p-Xylene	18712.4	ug/kg	0.2	ug/kg
o-Xylene	3852.8	ug/kg	0.2	ug/kg
	TOTAL	25029.9		ug/kg

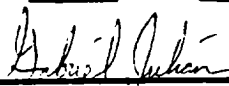
Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: 
Date: **10/30/96**

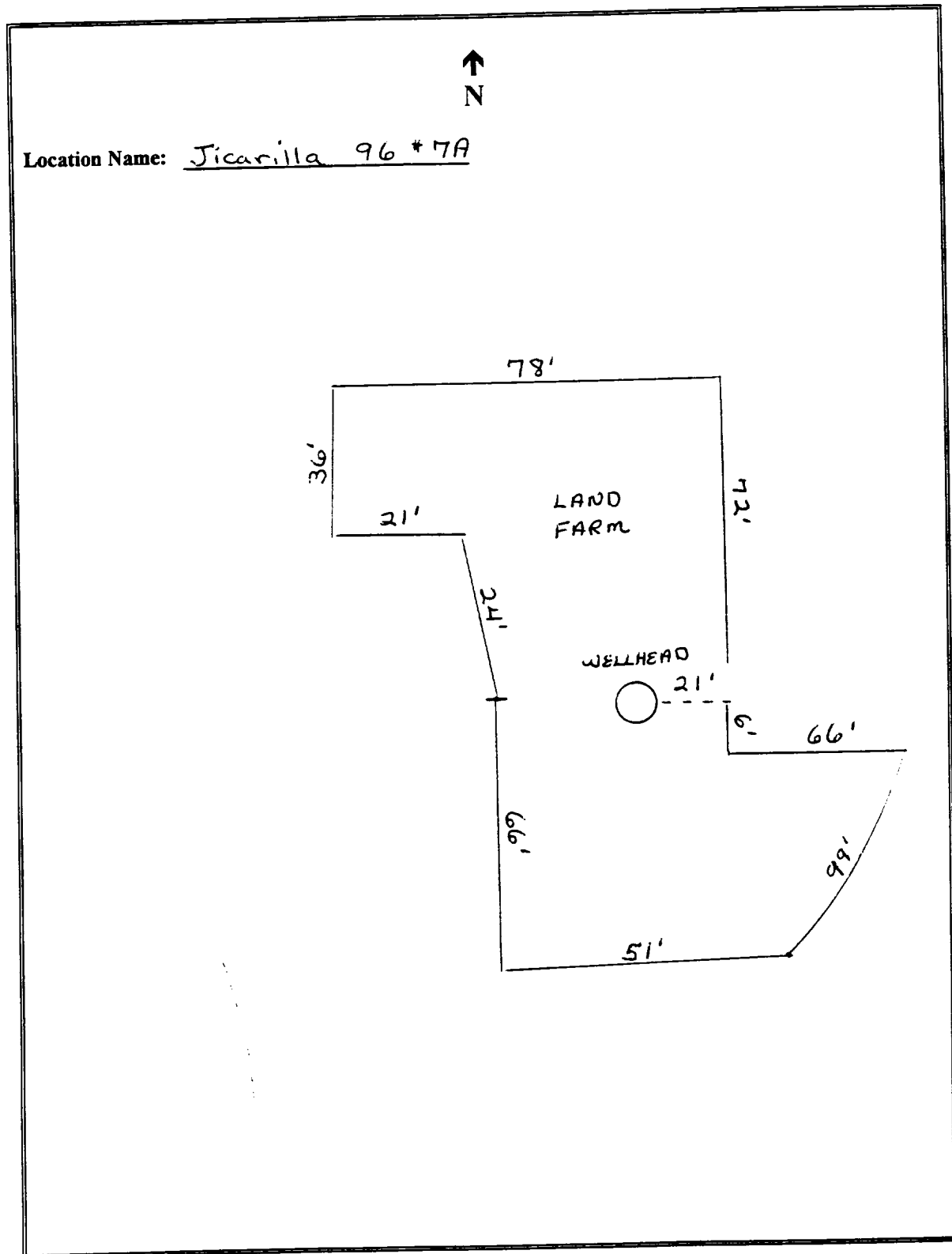
JICARILLA APACHE TRIBE
ENVIRONMENTAL
PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO
NATURAL
RESOURCE DEPT
AND OIL GAS
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: <u>BURLINGTON 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 #7A</u>			
Location: Unit: <u>D</u> Sec. <u>1</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>8-21-96</u>		Date Completed: _____	
Remediation Method: Landfarmed ☒		Approx. cubic yards <u>839</u>	
Composted ☐		_____	
Other ☐		_____	
Depth to Ground Water: (pts.) <u>10</u>		Final Closure Sampling:	
Distance to an Ephemeral Stream: (pts.) <u>0</u>		Sampling Date: <u>10/7/96</u> Time <u>14:40</u>	
Distance to Nearest Lake, Playa, or Watering Pond: (pts.) <u>0</u>		Sampling Results:	
Wellhead Protection Area: (pts.) <u>0</u>		Field Headspace (ppm) <u>9.8</u>	
Distance to Surface Water: (pts.) <u>0</u>		TPH (ppm) <u>15.8</u> Method <u>8015</u>	
Ranking Score (Total Points): <u>10</u>		Other _____	
Sample No. <u>m6-29234A-2-LF</u>			
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE <u>10/16/96</u>		PRINTED NAME <u>Guy L Garretson</u>	
SIGNATURE <u></u>		AND TITLE <u>Lease operator</u>	
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: <u></u>		DATE: <u>10/17/96</u>	

ON-SITE SOIL REMEDIATION DIAGRAM



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: **10-Oct-96**
COC No.: **C1989**
Sample No. **12473**
Job No. **2-1000**

Project Name: **Burlington Resources - Jicarilla Pit Closures; Landfarm**
Project Location: **M6-29234A-2-LF**
Sampled by: **GG**
Analyzed by: **DC/HR**
Sample Matrix: **Soil**

Date: **7-Oct-96** Time: **14:40**
Date: **9-Oct-96**

Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Gasoline Range Organics (C5 - C9)	5.9	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	9.9	mg/kg	5.0	mg/kg
	TOTAL	15.8		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)	< 50	ppb	1,350	1,430	5.9	15%
Diesel Range (C10 - C28)	< 5.0	ppm	100	104	3.8	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	98	85	(70-130)	10	20%
Diesel Range (C10-C28)	89	98	(70-130)	7	20%

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by:

Date:

[Signature]
10/10/96