

TR
Tank - 26

**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

PIT REMEDIATION AND CLOSURE REPORT

Operator: RODDY PRODUCTION Telephone: 505-325-5750

Address: P.O. BOX 2221 FARMINGTON, NM 87499

Facility or Well Name: CHACON JICARRILLA APACHE D NO 8

Location: Unit or Qtr/Qtr Sec A Sec 9 T 23N R 3W County RIO ARRIBA NM

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: _____

Pit Location: Pit dimensions: length 15', width 15', depth 3'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 75

Direction from reference: S65W Degrees _____ East North _____
of
_____ 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) 0

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) 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
1000 feet from all other water sources)

Yes (20 points)
No (0 points) 0

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) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 06/29/97 Date Completed: 06/30/97

Remediation Method: Excavation X Approx. cubic yards 50
 (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: EXCAVATE PIT TO OVM LEVEL OF OPPM
SAMPLE 1 4' BELOW EXCAVATION SAMPLE 2 4 POINT COMPOSITE SIDES

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit: Sample location #1 - 4' BELOW EXCAVATION #2 - 1' PENETRATION EACH SIDE
 Closure Sampling: ANALYSIS - FIELD HEADSPACE AND TPH ALL SAMPLES
 (if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 10'
 Sample date 06/30/97 Sample time 07:40

Sample Results

Soil: Benzene (ppm) _____ Water: Benzene (ppb) _____
 Total BTEX (ppm) _____ Toluene (ppb) _____
 Field Headspace (ppm) S-0 B-0 Ethylbenzene (ppb) _____
 TPH (ppm) S-464 B-158 Total Xylcnes (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 KNOWLEGE AND BELIEF

DATE 8/21/97 PRINTED NAME BRADLEY W. SALZMAN

SIGNATURE Bradley W. Salzman AND TITLE AGENT

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: Karina X. Callado DATE: 8/21/97



Amoco Production Company

ENGINEERING CHART

Sheet No. _____ Of _____

File _____

Appn _____

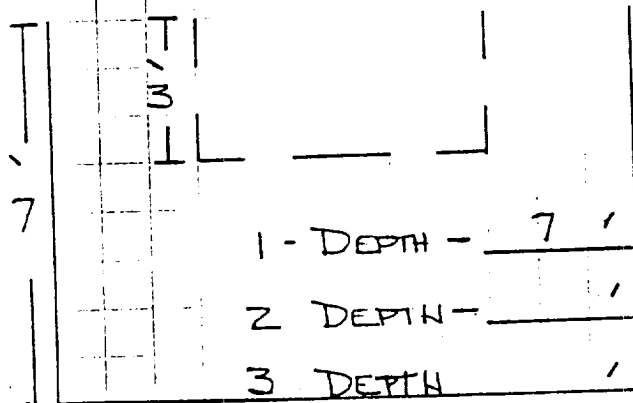
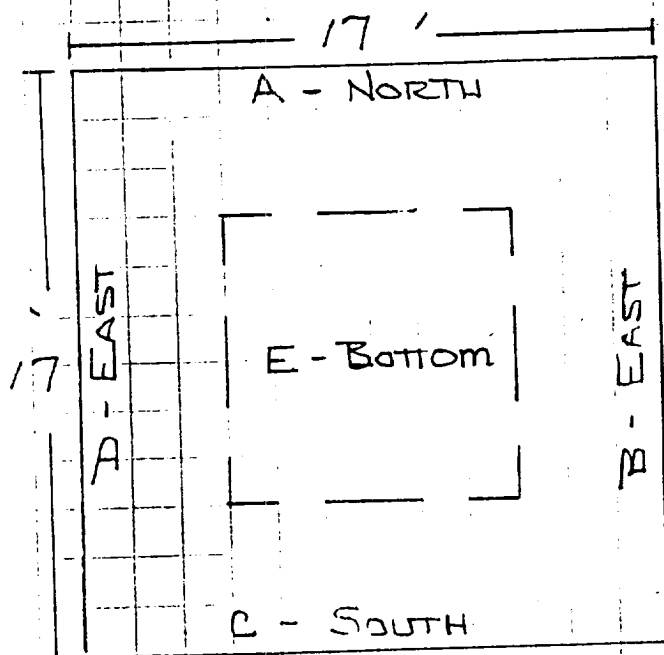
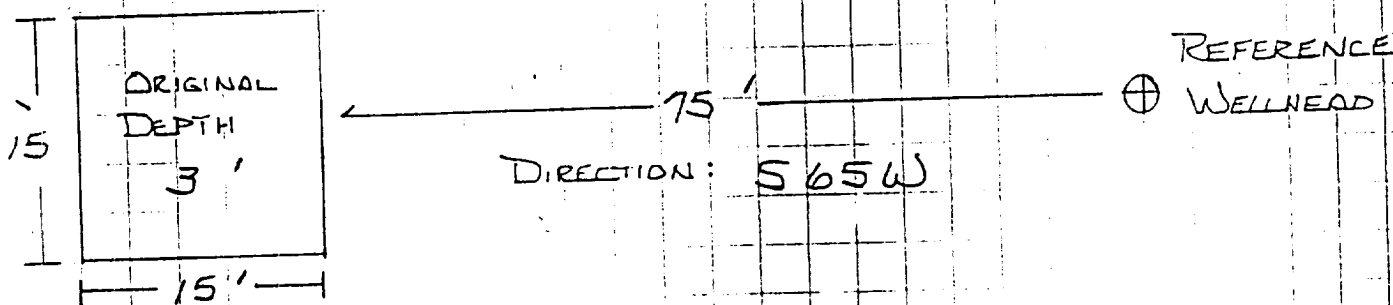
Date _____

By _____

SUBJECT RODDY PRODUCTION - PIT CLOSURE

FIELD NOTES

WELL NAME: CHARON JICORILLA APOCNE
D-8 SEPARATOR



SAMPLE ANALYSIS		
	OVM PPM	TPH PPM
A ₁	8	A-D 464
B ₁	13	
C ₁	1	
D ₁	0	
E ₁	0	158
A ₂		
B ₂		
C ₂		
D ₂		
E ₂		
A ₃		
B ₃		
C ₃		
D ₃		
E ₃		

— — — ORIGINAL
— — — EXCAVATED

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

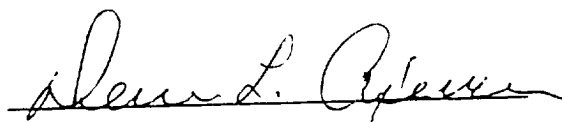
Client:	Roddy Production	Project #:	96300-44
Sample ID:	Chacon Jic. D-8 Sep Sides	Date Reported:	07-03-97
Laboratory Number:	B568	Date Sampled:	06-30-97
Chain of Custody No:	5279	Date Received:	07-01-97
Sample Matrix:	Soil	Date Extracted:	07-01-97
Preservative:	Cool	Date Analyzed:	07-01-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

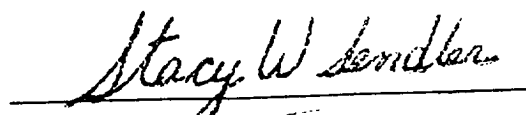
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	464	0.1
Total Petroleum Hydrocarbons	464	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: Jicarilla Pits.


Analyst


Review

Client/Project Name				Project Location		ANALYSIS/PARAMETERS										
Roddy Production				Jicarilla PITS												
Sampler: (Signature) B J Salzman				Chain of Custody Tape No. 96300-44												
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers						Remarks					
CUACON JICARILLA	6-30-97	07:10	B564	SOIL	1	8015						all sample received				
D-5 SEP SIDES	"	07:15	B565		1	TPH						cooling in hot dust				
D-5 SEP - BOT	"	07:30	B566		1											
D-8 TANK SIDES	"	07:35	B567		1											
D-8 TANK BOT.	"	07:40	B568		1											
D-8 SEP SIDES	"	07:45	B569		1											
D-8 SEP BOT.	"	08:10	B570		1											
D-3 LAND FARM	"	08:20	B571		1											
D-4 LAND FARM	"	09:00	B572		1											
Ameo JIC.																
#1 LAND FARM																
Relinquished by: (Signature) B J Salzman				Date 7-1-97	Time 09:15	Received by: (Signature) Dean L. Quinn					Date 7-1-97	Time 09:15				
Relinquished by: (Signature)						Received by: (Signature)										
Relinquished by: (Signature)						Received by: (Signature)										

ENVIROTECH INC.
5796 U.S. Highway 64-3014
Farmington, New Mexico 87401
(505) 632-0615

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

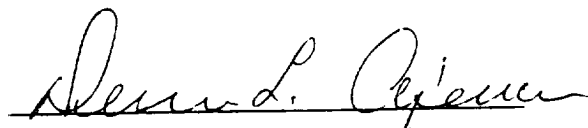
Client:	Roddy Production	Project #:	96300-44
Sample ID:	Chacon Jic. D-8 Sep Bot.	Date Reported:	07-03-97
Laboratory Number:	B569	Date Sampled:	06-30-97
Chain of Custody No:	5279	Date Received:	07-01-97
Sample Matrix:	Soil	Date Extracted:	07-01-97
Preservative:	Cool	Date Analyzed:	07-01-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

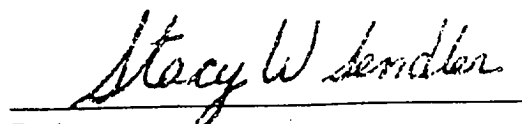
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	158	0.1
Total Petroleum Hydrocarbons	158	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: Jicarilla Pits.


Analyst


Review

SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

1931 12 1958

Land Type: _____

Direction from reference: N55W Degrees _____ East North _____
of
West South _____

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

RANKING SCORE (TOTAL POINTS): _____

Date Remediation Started: 06/29/97 Date Completed: 06/30/97
Remediation Method: Excavation X Approx. cubic yards 30
(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: EXCAVATE PIT TO OVM LEVEL OF OPPM
SAMPLE 1 4' BELOW EXCAVATION SAMPLE 2 4 POINT COMPOSITE SIDES

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit: Sample location #1 - 4' BELOW EXCAVATION #2 - 1' PENETRATION EACH SIDE
Closure Sampling: ANALYSIS - FIELD HEADSPACE AND TPH ALL SAMPLES
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 9'
Sample date 06/30/97 Sample time 07:30

Sample Results

Soil: Benzene	(ppm) _____	Water: Benzene	(ppb) _____
Total BTEX	(ppm) _____	Toluene	(ppb) _____
Field Headspace (ppm)	<u>S-0</u> <u>B-0</u>	Ethylbenzene	(ppb) _____
TPH	(ppm) <u>S-0</u> <u>B-99</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 8/21/97 PRINTED NAME BRADLEY W. SALZMAN

SIGNATURE Bradley W. Salzman AND TITLE AGENT

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: Karena H. Callado DATE: 8/27/97



Amoco Production Company

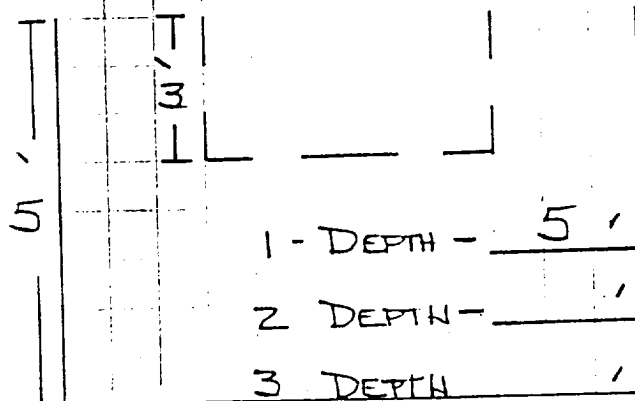
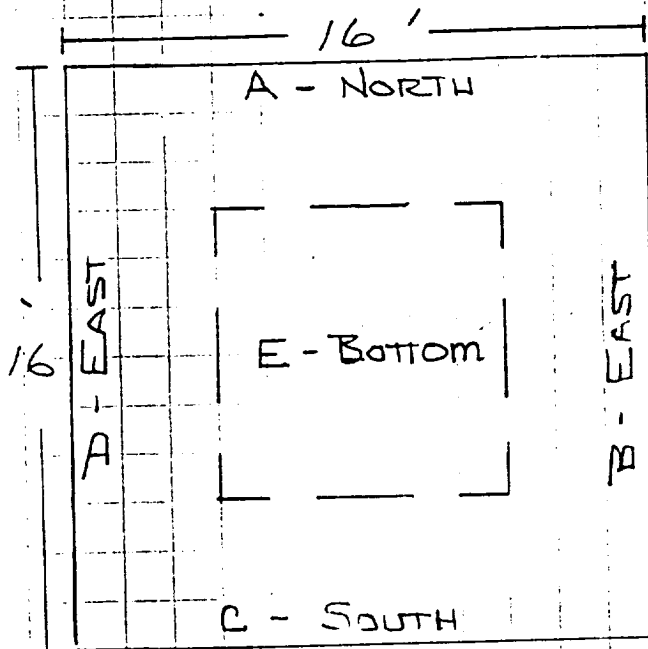
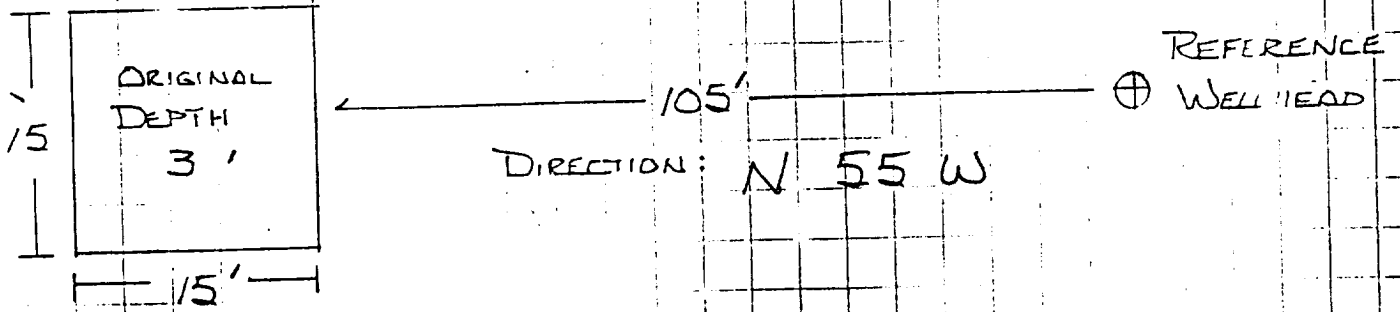
ENGINEERING CHART

Sheet No. _____ Of _____
File _____
Appn _____
Date _____
By _____

SUBJECT RODDY PRODUCTION - PIT CLOSURE

FIELD NOTES

WELL NAME: CHACON JICARILLO D-8
TANK



SAMPLE ANALYSIS		
	OVM PPM	TPH PPM
A ₁	0	A-D 0
B ₁	12	
C ₁	3	
D ₁	7	
E ₁	0	99
A ₂		
B ₂		
C ₂		
D ₂		
E ₂		
A ₃		
B ₃		
C ₃		
D ₃		
E ₃		

— ORIGINAL
— EXCAVATED

**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

Client:	Roddy Production	Project #:	96300-44
Sample ID:	Chacon Jic. D-8 Tank Sides	Date Reported:	07-03-97
Laboratory Number:	B566	Date Sampled:	06-30-97
Chain of Custody No:	5279	Date Received:	07-01-97
Sample Matrix:	Soil	Date Extracted:	07-01-97
Preservative:	Cool	Date Analyzed:	07-01-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

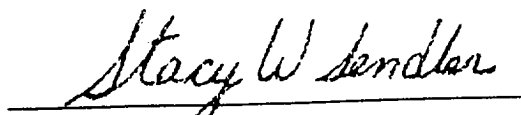
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: **Jicarilla Pits.**


Analyst


Review

ENVIROTECH INC.
5796 U.S. Highway 64-3014
Farmington, New Mexico 87401

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

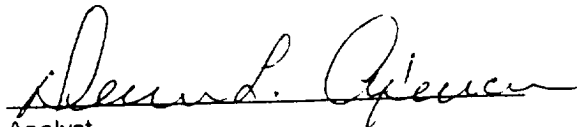
Client:	Roddy Production	Project #:	96300-44
Sample ID:	Chacon Jic. D-8 Tank Bot	Date Reported:	07-03-97
Laboratory Number:	B567	Date Sampled:	06-30-97
Chain of Custody No:	5279	Date Received:	07-01-97
Sample Matrix:	Soil	Date Extracted:	07-01-97
Preservative:	Cool	Date Analyzed:	07-01-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

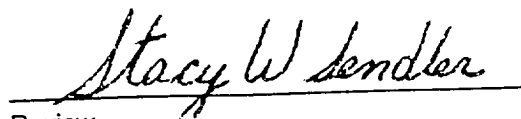
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	99.0	0.1
Total Petroleum Hydrocarbons	99.0	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: Jicarilla Pits.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name			Project Location		ANALYSIS/PARAMETERS													
Roddy Production			SICARILLA PITS															
Sampler: (Signature) <i>B. J. Salzman</i>			Chain of Custody Tape No. 96300-44															
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers									Remarks				
CUACON SICARILLA	6-30-97	07:10	B564	Soil	1	1												
D-5 SEP SIDES	"	07:15	B565		1	1												
D-5 SEP - BOT	"	07:30	B566		1	1												
D-8 Tank Sides	"	07:35	B567		1	1												
D-8 Tank BOT.	"	07:40	B568		1	1												
D-8 SEP SIDES	"	07:45	B569		1	1												
D-8 SEP BOT.	"	08:10	B570		1	1												
D-3 LAUD FARM	"	08:20	B571		1	1												
D-4 LAUD FARM	"	09:00	B572		1	1												
Ameada Sic.	"																	
#1 LAUD FARM	"																	
Relinquished by: (Signature) <i>B. J. Salzman</i>			Date 7-1-97		Time 09:15		Received by: (Signature) <i>Robert L. Givens</i>								Date 7-1-97		Time 09:15	
Relinquished by: (Signature)							Received by: (Signature)											
Relinquished by: (Signature)							Received by: (Signature)											

ENVIROTECH INC.

5796 U.S. Highway 64-3014

Farmington, New Mexico 87401

(505) 632-0615

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

ON-SITE SOIL REMEDIATION REPORT

Operator: Roddy Production Telephone: (505) 325-5750

Address: P.O. Box 2221, Farmington, NM 87499

Facility or Well Name: Chacon Jicarilla Apache D-8

Location: Unit or Qtr/Qtr Sec A Sec 9 T 23N R 3W County Rio Arriba

Land Type: Range

Date Remediation Started: July 1997 Date Completed: September 1999

Remediation Method: Landfarmed X Approx. cubic yards 80

Composed

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: 9/15/99 Time: 14:20

Sample Results:

Field Headspace (ppm) 2.4

TPH (ppm) 27.1 Method 8015

Other:

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

DATE: October 4, 1999 PRINTED NAME B.W. Salzman

SIGNATURE B.W. Salzman AND TITLE Agent

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: K.C. Mando DATE: 10-20-99

Location: <u>Chacon Jicarilla Apache D-8</u> Quad: <u>A</u> Section: <u>9</u> Township: <u>23 N</u> Range: <u>3 W</u>		Overview of Landfarm and Sampling :																																											
Pits:	Separator and Tank	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sample #</th> <th>Location</th> <th>OVM</th> </tr> </thead> <tbody> <tr><td>1</td><td>Comp 1</td><td>2.4</td></tr> <tr><td>2</td><td></td><td></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> <tr><td>13</td><td></td><td></td></tr> </tbody> </table>	Sample #	Location	OVM	1	Comp 1	2.4	2			3			4			5			6			7			8			9			10			11			12			13			Reference: LF #1: 80' west of wellhead LF #2: 70' southwest of wellhead Size: (Approximate) LF #1: 20' x 15' x 15" deep LF #2: 40' x 30' x 6" deep Yds: LF #1: 30 cubic yards LF #2: 50 cubic yards 1 5 - Point Composite(s)
Sample #	Location	OVM																																											
1	Comp 1	2.4																																											
2																																													
3																																													
4																																													
5																																													
6																																													
7																																													
8																																													
9																																													
10																																													
11																																													
12																																													
13																																													
Comments: A sample from composite # 1 was sent to Envirotech for TPH 8015 analysis.																																													

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

September 20, 1999

Mr. Brad Salzman
Roddy Production Company
P.O. Box 2221
Farmington, New Mexico 87499

Project No.: 99063
Job No.: 906301

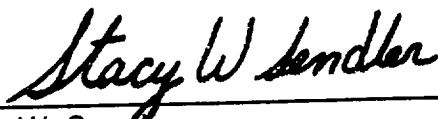
Dear Mr. Salzman,

Enclosed are the analytical results for the sample collected from the location designated as "Jicarilla Land Farms". One soil sample was collected by Roddy Production Company designated personnel on 09/15/99, and delivered to the Envirotech laboratory on 09/16/99 for Total Petroleum Hydrocarbons (TPH) analysis per USEPA Method 8015 Modified.

The sample was documented on Envirotech Chain of Custody No. 7343 and assigned Laboratory No. G078 (CJA D-8) for tracking purposes. The sample was extracted and analyzed on 09/17/99 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.



Stacy W. Sender
Environmental Scientist/Laboratory Manager

enclosure

SWS/sws/99063/906301.lb4/wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

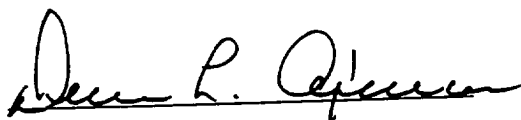
Client:	Roddy Proc. Co.	Project #:	906301
Sample ID:	CJA D - 8	Date Reported:	09-17-99
Laboratory Number:	G078	Date Sampled:	09-15-99
Chain of Custody No:	7343	Date Received:	09-16-99
Sample Matrix:	Soil	Date Extracted:	09-17-99
Preservative:	Cool	Date Analyzed:	09-17-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

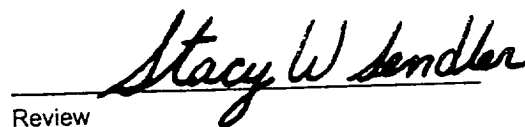
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.7	0.2
Diesel Range (C10 - C28)	25.4	0.1
Total Petroleum Hydrocarbons	27.1	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla Land Farms.


Analyst


Review

7343

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615