

SEP - OK - needs
Tank - OK correct
1,230

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

RECEIVED
NOV 12 1969
FBI
DIV.

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 06/26/97 Date Completed: 06/30/97

Remediation Method: Excavation X Approx. cubic yards 50

(Check all appropriate sections)

Landfirmed X

Insitu Bioremediation _____

Other _____

Remediation Location: Onsite X Offsite _____
(i.e. landfirmed 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 FEET

Sample date 06/30/97 Sample time 10:00

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-118 B-230 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: Karina Calhoun DATE: 8-27-97



Amoco Production Company

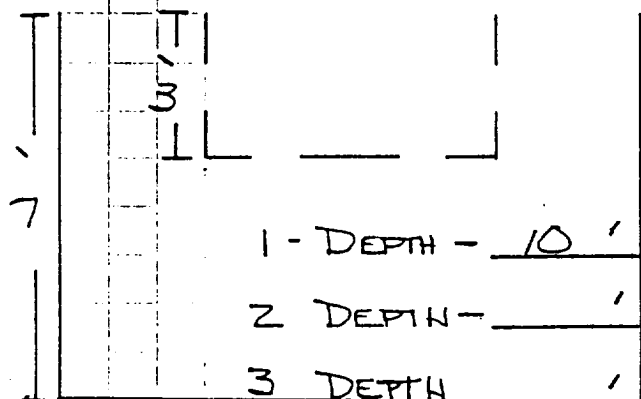
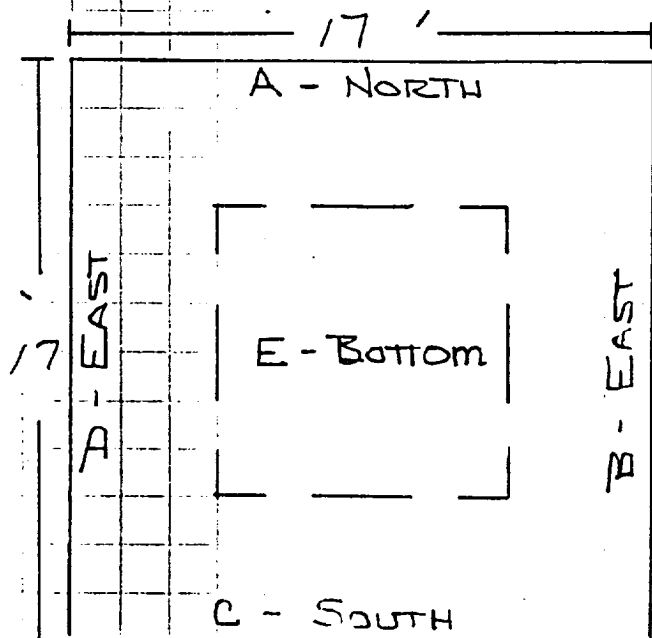
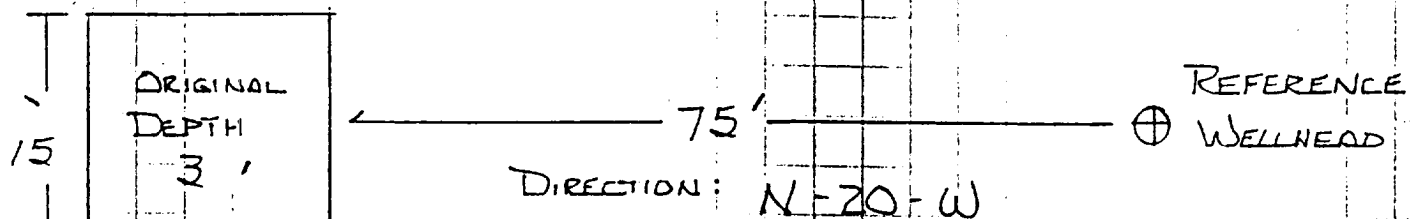
ENGINEERING CHART

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

SUBJECT RODDY PRODUCTION - PIT CLOSURE

FIELD NOTES

WELL NAME: AMERLADA JILARILLO 3
SEPARATOR



— — — ORIGINAL
— — — EXCAVATED

SAMPLE ANALYSIS

	OVM PPM	TPH PPM
A ₁	0	A-D 118
B ₁	0	
C ₁	0	
D ₁	0	
E ₁	0	
A ₂		230
B ₂		
C ₂		
D ₂		
E ₂		
A ₃		
B ₃		
C ₃		
D ₃		
E ₃		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

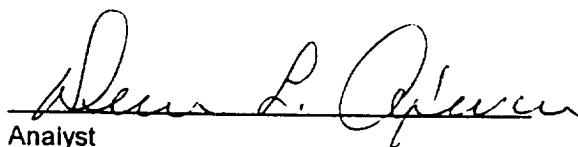
Client:	Roddy Production	Project #:	96300-44
Sample ID:	Amerada Jic. #3 Sep Sides	Date Reported:	07-03-97
Laboratory Number:	B577	Date Sampled:	06-30-97
Chain of Custody No:	5280	Date Received:	07-01-97
Sample Matrix:	Soil	Date Extracted:	07-01-97
Preservative:	Cool	Date Analyzed:	07-02-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

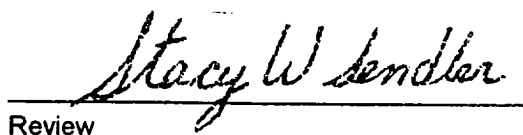
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	118	0.1
Total Petroleum Hydrocarbons	118	0.2

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																						
Robby Production		JICARILLA PTS																								
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	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	Remarks
AMEZADA JIC.	6-30-97	09:10	B573	SOIL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	all samples received cool & intact at	
#2 LAND FORM	"	"	B574		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
#4 LAND FORM	"	09:20	B574		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
#3 TANK SIDES	"	09:50	B575		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
#3 TANK BOT.	"	09:55	B576		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
#3 SEP. SIDES	"	10:00	B572		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
#3 SEP. BOT	"	10:05	B578		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
CUACON JIC.	"	11:10	B579		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
D-9 TANK SIDES	"	11:15	B580		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
D-9 TANK BOT.	"				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
D-2 LAND FORM	"	10:30	B581		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Relinquished by: (Signature) <i>B. J. Salzman</i>		Date	7-1-97	Time	09:15	Received by: (Signature) <i>John A. Oliver</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

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

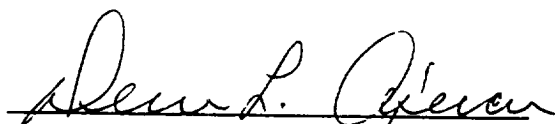
Client:	Roddy Production	Project #:	96300-44
Sample ID:	Amerada Jic. #3 Sep Bot	Date Reported:	07-03-97
Laboratory Number:	B578	Date Sampled:	06-30-97
Chain of Custody No:	5280	Date Received:	07-01-97
Sample Matrix:	Soil	Date Extracted:	07-01-97
Preservative:	Cool	Date Analyzed:	07-02-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	61.1	0.2
Diesel Range (C10 - C28)	1,170	0.1
Total Petroleum Hydrocarbons	1,230	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

RECEIVED
NOV 12 1999

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 06/27/97 Date Completed: 06/30/97Remediation Method: Excavation X Approx. cubic yards 100

(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 OPPMSAMPLE 1 4' BELOW EXCAVATION SAMPLE 2 4 POINT COMPOSITE SIDESGroundwater Encountered: No X Yes _____ Depth _____Final Pit: Sample location #1 - 4' BELOW EXCAVATION #2 - 1' PENETRATION EACH SIDE

Closure Sampling:

(if multiple samples, attach sample results and diagram of sample locations and depths) ANALYSIS - FIELD HEADSPACE AND TPH ALL SAMPLESSample depth 11 FEETSample date 06/30/97 Sample time 09:50

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-316 B-291 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. SALZMANSIGNATURE 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: Karen A. Calhoun DATE: 8/27/97



Amoco Production Company

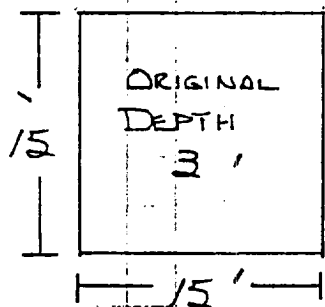
ENGINEERING CHART

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

SUBJECT RODDY PRODUCTION - PIT CLOSURE

FIELD NOTES

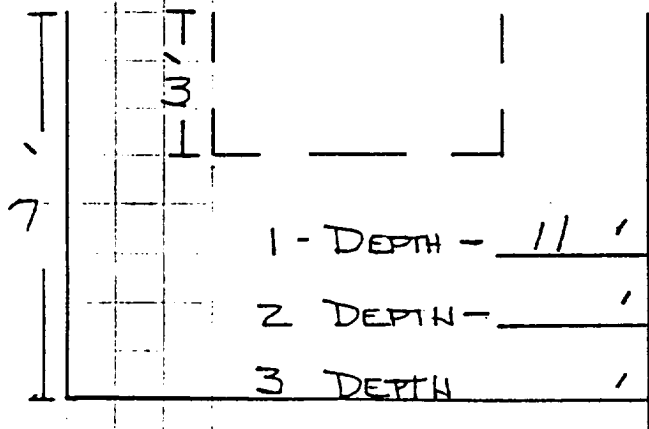
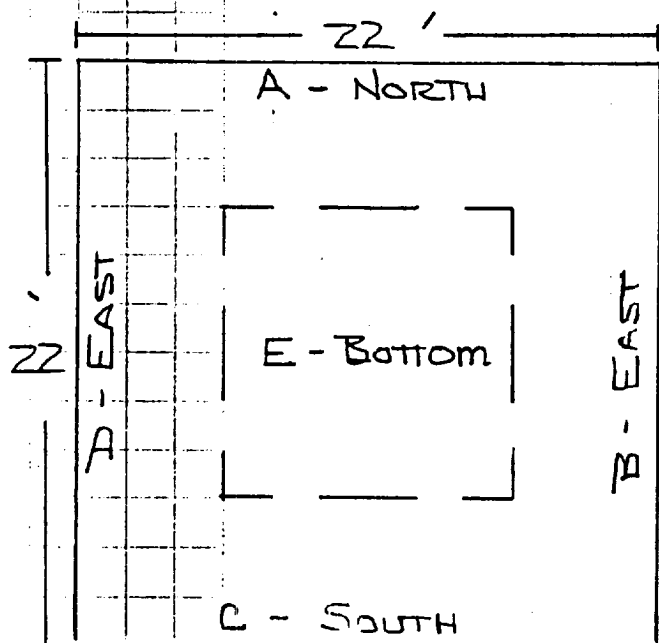
WELL NAME: AMERDDA JICARILLO 3
TANK



170'

DIRECTION: N-50-W

REFERENCE
⊕ WELLHEAD



— ORIGINAL
— EXCAVATED

SAMPLE ANALYSIS

	OVM PPM	TPH PPM
A ₁	0	A-D 316
B ₁	1	
C ₁	7	
D ₁	0	
E ₁	4	291
A ₂		
B ₂		
C ₂		
D ₂		
E ₂		
A ₃		
B ₃		
C ₃		
D ₃		
E ₃		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

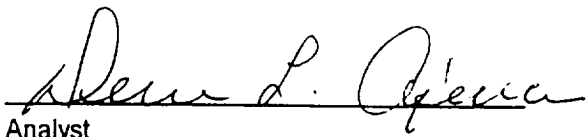
Client:	Roddy Production	Project #:	96300-44
Sample ID:	Amerada Jic. #3 Tank Sides	Date Reported:	07-03-97
Laboratory Number:	B575	Date Sampled:	06-30-97
Chain of Custody No:	5280	Date Received:	07-01-97
Sample Matrix:	Soil	Date Extracted:	07-01-97
Preservative:	Cool	Date Analyzed:	07-02-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

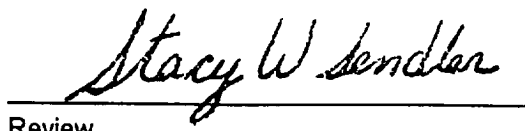
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	316	0.1
Total Petroleum Hydrocarbons	316	0.2

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									
Robby Production		TICARILLA 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			
AMEZADA JIC.	6-30-97	09:10	B573	SOIL	1	1	1	1	1	1	all samples received		
#2 LAND FORM	"	"	B574		1	1	1	1	1	1	coal 5' intact at		
#4 LAND FORM	"	09:20	B574		1	1	1	1	1	1			
#3 TANK SIDES	"	09:50	B575		1	1	1	1	1	1			
#3 TANK BOT.	"	09:55	B576		1	1	1	1	1	1			
#3 SEP. SIDES	"	10:00	B577		1	1	1	1	1	1			
#3 SEP. BOT	"	10:05	B578		1	1	1	1	1	1			
CHACON JIC.	"	11:10	B579		1	1	1	1	1	1			
D-9 TANK SIDES	"	11:15	B580		1	1	1	1	1	1			
D-9 TANK BOT.	"	"	B581		1	1	1	1	1	1			
D-2 LAND FORM	"	10:30	B581		1	1	1	1	1	1			
Relinquished by: (Signature) <i>B. J. Salzman</i>		Date	Time	Received by: (Signature) <i>Alvaro L. Ojeda</i>		Date		Time					
Relinquished by: (Signature)				Received by: (Signature)									
Relinquished by: (Signature)				Received by: (Signature)									

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

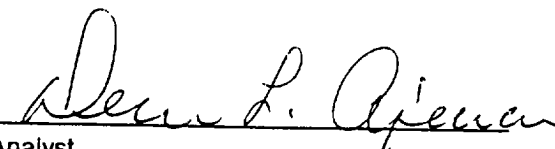
Client:	Roddy Production	Project #:	96300-44
Sample ID:	Amerada Jic. #3 Tank Bot	Date Reported:	07-03-97
Laboratory Number:	B576	Date Sampled:	06-30-97
Chain of Custody No:	5280	Date Received:	07-01-97
Sample Matrix:	Soil	Date Extracted:	07-01-97
Preservative:	Cool	Date Analyzed:	07-02-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

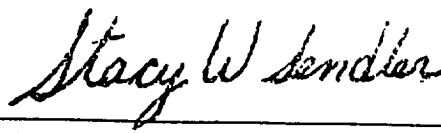
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	291	0.1
Total Petroleum Hydrocarbons	291	0.2

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.

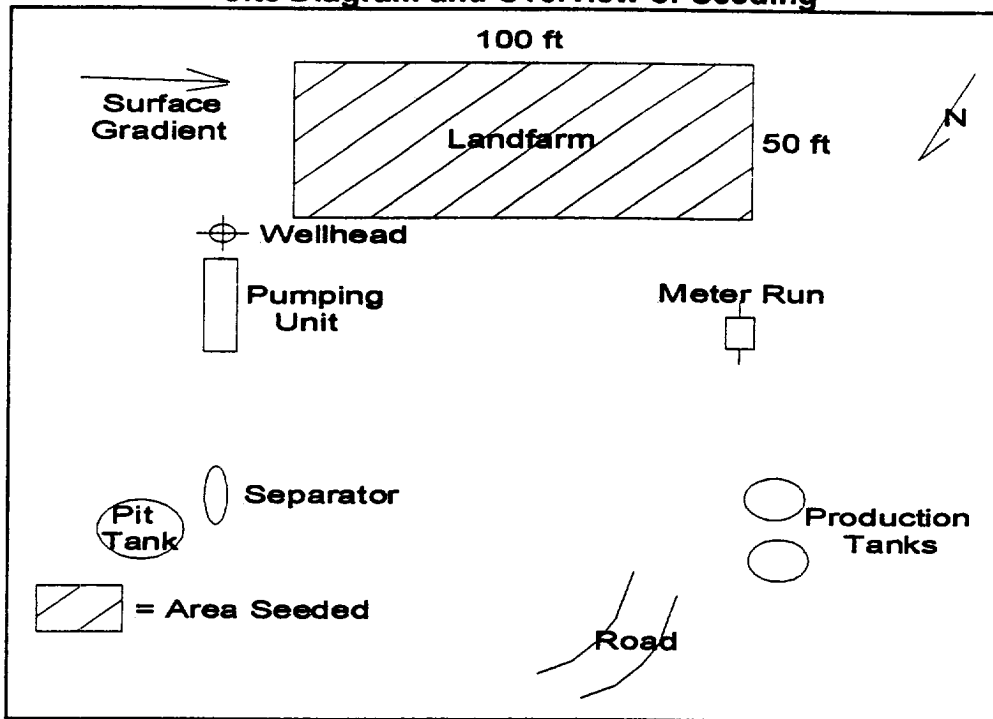
Client : **Roddy Production**

Location : Amerada Jicarilla #3

Quad : D Section : 2 Township : 23N Range : 3W

County : Rio Arriba

Site Diagram and Overview of Seeding



Date Seeded: October 19, 1999

Seed Mix: Bag Number: 27579 #1, 27580 #1 North _____ South X

Weed Certification Confirmation: Yes X No

Seeding Rate: 21 PLS Pounds per Acre

Approximate Area Seeded: 5,000 sq. ft. 0.11 acres

Equipment Used: MF Tractor with Drill Seeder

Seeded By: RB

Comments: _____

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: Amerada Jicarilla #3
Location: Unit or Qtr/Qtr Sec D Sec 2 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 150
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: 15:10

Sample Results:

Field Headspace (ppm) 67.5

TPH (ppm) 1,161.3 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. M... DATE: 10/20/99

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. 7344 and assigned Laboratory No. G079 (Amerada Jicarilla #3) 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. Sendler
Environmental Scientist/Laboratory Manager

enclosure

SWS/sws/99063/906301.lb5/wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

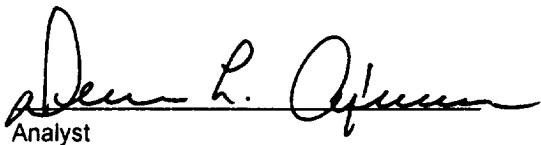
Client:	Roddy Proc. Co.	Project #:	906301
Sample ID:	Amerada Jicarilla #3	Date Reported:	09-17-99
Laboratory Number:	G079	Date Sampled:	09-15-99
Chain of Custody No:	7344	Date Received:	09-16-99
Sample Matrix:	Soil	Date Extracted:	09-17-99
Preservative:	Cool	Date Analyzed:	09-17-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.3	0.2
Diesel Range (C10 - C28)	1,160	0.1
Total Petroleum Hydrocarbons	1,160	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

7344

ENVIROTECH INC.

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