## JICARILLA APACHE TRIBE SAME ENVIRONMENTAL PROTECTION OFFICE P.O. BOX 507

DULCE, NEW MEXICO 87528

Blow-OK ISJ 466

SEP - RISK OF SUBMIT 1 COPY TO NATURAL RESOURCE DEPT

DEGE NATURAL RESOURCE DEPT

AUG 0 9 1999

### PIT REMEDIATION AND CLOSURE REPORT CON. DIV.

Non-vulnerable	practical extent DISTI. 3
Operator: AMOCO PRODUCTION COMPANY	<b>Telephone:</b> (505)326-9200
Address: 200 Amoco Court, Farmington,	, NM 87401
Facility or Well Name: JICARILLA APRO	
Location: Unit or Qtr/Qtr Sec_P Sec_4	
Pit Type: Separator Dehydrator Other_	BLOW
Land Type: RANGE	
(Attach diagram)	
· ·	20 Degrees X East North
Direction from reference.	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)
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)
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	d Less than 100 feet (10 points) Greater than 100 feet (0 points)
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)
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, iigation canals and ditches)	Less than 100 feet (20 points) 100 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)
	RANKING SCORE (TOTAL POINTS):

			BLOW PIT	RT406
Data Pamadiation Sta	arted:	Date Comple	eted:	8196
mediation Method:				60
eck all appropriate	Landfarmed ×			
sections)	Other			
Remediation Location				
(i.e. landfarmed onsite, name and location of	. Offsite Offsite			
offsite facility)				
General Description	of Remedial Action: Excava	tion		
		Denth		
Groundwater Encoun	tered: No X 1 es	S Depth		
Final Pit: Closure Sampling: (if multiple samples,	Sample location see Attac	thed Documents		
attach sample results and diagram of sample	Sample depth 30'			
locations and depths)	Sample date $\frac{8 z }{ z }$		time	
	Sample Results			
	Soil: Benzene (ppn	n) <u>1.42</u> Wate	r: Benzene	(ppb)
	Total BTEX (ppr		Toluene	(ppb)
	Field Headspace (ppr		Ethylbenzene	(ppb)
	TPH (8015) (ppn		Total Xylenes	(ppb)
Groundwater Sample	: Yes No	(If yes, attach san	nple results)	
I HEREBY CERTIFY KNOWLEGE AND B	THAT THE INFORMATION A	ABOVE IS TRUE AND	COMPLETE TO	THE BEST OF MY
DATE	8/28/96 PRINTI	ED NAME Buddy D	. Shaw	
SIGNATURE BLA	ly D. Show AND	TITLE Environ	mental Coor	dinator
AFTED DEVIEW OF	THE PIT CLOSURE INFORMATION APACHE TRIBE PIT CLOSU	ATION, PIT CLOSURE RE ORDINANCE.	IS APPROVED	IN ACCORDANCE
APPROVED: YES _	NO (REASON)			

DATE: 8-29-96

BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	C.O.C. NO: 4896	
FIELD REPORT: PIT CLOSURE VERIFICATION	NC	
LOCATION: JICARILLA APACHE LOZ #9E PIT TYPE: BLOW  QUAD/UNIT: P SEC: 4 TWP: 26 N RNG: 40 BM: MM CNTY: RA ST: NM  QTR/FOOTAGE: SE/SE CONTRACTOR: PAUL	DATE STARTED: R-19-96 DATE FINISHED: 8-25-96  ENVIRONMENTAL & EO SPECIALIST:	
EXCAVATION APPROX. 40 FT. × 40 FT. × 28 FT. DEEP. CUBI  DISPOSAL FACILITY: 0 P SITE REMEDIATION METHOD  LAND USE: RAYGE LEASE: + 102 FORMA	LA MOFARM	
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 300 FEET 520° F FROM WELLHEAD.		
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'  NMOCD RANKING SCORE: O NMOCD TPH CLOSURE STD: 5000 PPM		
SOIL AND EXCAVATION DESCRIPTION: PIT DISPOSITION: ASAMONED		
SOIL AND EXCAVATION DESCRIPTION: PIT DISPUSITION: MORIN, LIGHT ODOR IN ROTTOM.		
SAMPLED BOTTOM AGAIN APTRE ADDITIONAL EXCAVATION,		
SCALE  FIELD 418.1 CALCULATIONS  FIELD 418.1 CALCULATIONS  WEIGHT (g) mL. FREON DILUTION READING CAL  EB @ 23' 1782 10.0 20.0 10 633 [2]		
O 10 20FT OVM PIT PERIMETER RESULTS PIT	PROFILE	
SAMPLE FIELD HEADSPACE PID (PPM)  1 NS -/S 7  2 es - 1S 4  3 JS - 1S' 3  4 WJ - 1S' 6  5 EB - 23' 184  6 EB @ 30' 290  8/26 EB @ 30' RTEY / 8015  SURFACE GRADIENT  SURFACE GRADIENT  SAMPLE FIELD HEADSPACE PID (PPM)  1 NS -/S 7  2 es - 1S 4  3 JS - 1S' 3  4 WJ - 1S' 6  EB @ 30' 290  ADDITIONAL EY CAUNTUM  EY CAUNTUM	28	
TRAVEL NOTES: CALLOUT: 2-11-96 ONSITE: 3-14-96	0 <b>9</b> 20 FORM REVISED 7/95	

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

#### FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Sample ID:

**Project Location:** 

Laboratory Number:

Amoco

East Bottom @ 23'

Jicarilla Apache 102 # 9E

TPH #1782

Project #:

Date Analyzed: Date Reported:

8-14-96 8-15-96

Sample Matrix:

Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	12,700	100

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg

Duplicate

1,344

TPH mg/kg

% \*Diff.

5

1.420

\*Administrative Acceptance limits set at 30%.

Method:

Modified Method 418.1, Petroleum Hydrocarbons, Total

Recoverable, Chemical Analysis of Water and Waste,

**USEPA Storet No.4551, 1978** 

Comments:

Blow Pit - BJ406

R. E O'real

Hilton Vil



Client:	Amoco / Blagg	Project #:	04034
Sample ID:	E. Bottom @ 30'	Date Reported:	08-27-96
Laboratory Number:	A503	Date Sampled:	08-26-96
Chain of Custody No:	4896	Date Received:	08-27-96
Sample Matrix:	Soil	Date Extracted:	08-27-96
Preservative:	Cool	Date Analyzed:	08-27-96
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	47.6	0.2
Diesel Range (C10 - C28)	105	0.1
Total Petroleum Hydrocarbons	153	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 Apache 102 #9E Blow Pit.

Dem L. Cylencer Analyst Stacy W Sendler
Review



#### EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Chain of Custody:	Amoco / Blagg E. Bottom @ 30' A503 4896	Project #: Date Reported: Date Sampled: Date Received:	04034 08-28-96 08-26-96 08-27-96
Sample Matrix: Preservative:	Soil Cool	Date Analyzed: Date Extracted:	08-27-96 08-27-96
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1,420	17.5
Toluene	2,990	16.7
Ethylbenzene	1,900	15.2
p,m-Xylene	17,650	21.6
o-Xylene	5,130	10.4
Total BTEX	29,090	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	101 %
	Bromofluorobenzene	100 %

References:

Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

July 1992.

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, Sept. 1994.

Comments:

Jicarilla Apache 102 #9E Bl

Blow Pit.

Analyst

Stacy W Sendler.
Review

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:

Client:

Sample ID:

**Project Location:** Laboratory Number: Amoco

East Bottom @ 23' Jicarilla Apache 102 # 9E

TPH #1782

Project #:

Date Analyzed: Date Reported: Sample Matrix:

8-14-96 8-15-96

Soil

Sample Weight: Volume Freon:

Dilution Factor:

TPH Reading:

10.00 grams

20.00 mL

12660.0 mg/kg

10 (unitless)

633 mg/kg

TPH Result: Reported TPH Result:

12700.0 mg/kg Actual Detection Limit: 100.0 mg/kg 100 mg/kg Reported Detection Limit

QA/QC:

Original TPH mg/kg

1420

Duplicate TPH mg/kg

% Diff.

1344

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Comments:

Comments:

Blow Pit - BJ406

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Client/Droject Name				CITAIN OF COSTOD! NECOND			3				
<i>\</i>	BUKE		JICARUM APACHE	THE 102 # 9E				ANALYSIS/P	ANALYSIS/PARAMETERS	,-	
Sampler: (Signature) R. E. O. Kg	bal		Chain of Custody Tape No.	No.	to	<b> </b>				B.	Remarks
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. o	r d	108				
E. Peron @ 30	8.26.96	1400	A503	Soll	-	7	7			8600	PIT
Relinquished by: (Signature)	(; B)		0		Received by: (Signature)	(Signature)	]_`	6			Date Time
	3		0	01/0		1 1	2	20		8%	8/2/8 0110
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				ENVIROTECH INC. 5796 U.S. Highway 64:3014 Farmington, New Mexico 87401 (505) 632-0615	SCH INC Iway 64-301 Mexico 87 2-0615	.; 4. 401					
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# 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

	(707)000 0000
Operator: AMOCO PRODUCTION COMPANY	<b>Telephone:</b> (505)326-9200
Address: 200 Amoco Court, Farmington,	
Facility or Well Name: JCARCUA APACHE	
Location: Unit or Qtr/Qtr Sec P Sec 4 T	26 P R4 County RIO ARRIBA
Pit Type: Separator X Dehydrator Other	
Land Type: RKV6E	
Pit Location: Pit dimensions: length	30', width40', depthz0'
r e e e e e e e e e e e e e e e e e e e	65 Degrees X East North
Direction from reference.	of West South K
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)
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)
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)
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)
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, image in ingation canals and ditches)	Less than 100 feet (20 points) 100 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)
h	RANKING SCORE (TOTAL POINTS):

Date Remediation St	arted:	Date Completed:	8 · 21 · 96
mediation Method:	• •		750 95
, heck all appropriate sections)	Landfarmed		
Journal of the state of the sta			
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)	n: Onsite X Offsite		
General Description	of Remedial Action: Excav	vation	
Groundwater Encour	ntered: No <u>X</u> Y	es Depth	
Final Pit: Closure Sampling: (if multiple samples,	Sample location see Atta	ached Documents	
attach sample results and diagram of sample	Sample depth /2 (50	WTH SIDEWALL) 20'(PIT	BOTTOM ) 90
locations and depths)	<u>-</u> -	Sample time /	
	Sample Results	SOUTH PIT SIDEWALL BOTTOM	t
l	•	pm) 0.381 Water: Benze	ene (ppb)
	Total BTEX (p		ene (ppb)
	Field Headspace (p		benzene (ppb)
		i	Xylenes (ppb)
Groundwater Sample	e: Yes No	(If yes, attach sample resu	lts)
I HEREBY CERTIFY KNOWLEGE AND E	THAT THE INFORMATION BELIEF	ABOVE IS TRUE AND COMPLI	ETE TO THE BEST OF MY
DATE	9/11/96 PRINT	FED NAME Buddy D. Shaw	7
SIGNATURE BLO	Ddy D. Shaw AN	D TITLEEnvironmental	Coordinator
AFTER REVIEW OF	THE PIT CLOSURE INFORM APACHE TRIBE PIT CLOSU	MATION, PIT CLOSURE IS APPIURE ORDINANCE.	ROVED IN ACCORDANCE
APPROVED: YES_		speny, condition clos	we till P+A
SIGNED:	- Maull D	of Well ATE: <u>9-17-96</u>	

RESURG TO PAUL 9-12-96

(	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199    C.D.C. ND: 4902
	FIELD REPORT: PIT CLOSURE VERIFICATION
	LOCATION: J(CARILLA AFACHE 102 # 9E PIT TYPE: SEF.  QUAD/UNIT: P SEC: 4 TWP: 26N RNG: 4W BM: NM CNTY: RA ST: NM  QTR/FUUTAGE: SE/SE CONTRACTOR: PA4L  DATE STARTED: 8-14-96  ENVIRONMENTAL SPECIALIST: PEG
	EXCAVATION APPROX. 30 FT. × 40 FT. × 20 FT. DEEP. CUBIC YARDS: 750  DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LAWFARM  LAND USE: FORMATION:
1	FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 125 FEET , S65° F FROM WELLHEAD.  DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'  NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM
	SOIL AND EXCAVATION DESCRIPTION: PIT DISPOSITION: ABANDONED  SOIL CONSISTS OF MOIST, BEOW, SAMOY SILT - NO STRIN, LIGHT OBOSS PIT FLOORED
	MITH ENDUMER APTER ADDITIONAL EXCRUATION. WAITING TO BE PLUTED OUT.  ADDITIONAL EXCRUATION CONDUCTED. RESAMPLED WORTH & SOUTH TIDEWOULS &  PIT POSTON.  (CONDITIONAL) - JKARILLA EPO (RISK HISESSED -MNOCE)  FIELD 418.1 CALCULATIONS  SAMPLE I.D. LAB No: WEIGHT (g) ml. FREON DILUTION READING CALC. ppm  NS @ 10' 1783 10.0 20.0 10 372 7,440
Congress of	SCALE  WB @ 20' 1784   10.0   20.0   10   536   10,720    O 10 20 FT OVM  PIT PERIMETER RESULTS PIT PROFILE
	TO PID (ppm)    1 NS-10' 36    2 ES-10' 19   3 SS-10' 26 4   4 WS-10' 17   5 WB-20' Z4    7 SS-12' 200   8 CB-22' 23   8 CB-22' 23
5 ₽€	GRADIENT ANTIED
	TRAVEL NOTES: CALLOUT: 8.14.96 ONSITE: 8-14.96 1030

Well Name:
Well Site location:
Pit Type:
Producing Formation:
Pit Category:
Horizonal Distance to Surface Water:
Vicinity Groundwater Depth:

Jicarilla Contract 102 #9E
Unit P, Sec. 4, T26N, R4W
Separator Pit
Basin Dakota
Non Vulnerable
> 1000 ft.
> 100 ft.

#### RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe reached practical extent for abandoned pit (20 ft. below grade) and for safety concerns (underground piping and surface equipment).

No past or future threat to surface water or groundwater is likely based on the following considerations:

- 1. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below presumed shallow sandstone bedrock (based on informal site observation of adjacent sandstone outcrop).
- 2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
- 3. Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
- 4. Well site located within the <u>non-vulnerable area</u> and is approximately 0.50 miles northwest of the nearest vulnerable area boundary (Cottonwood Canyon wash).

(Refer to <u>Pine Lake Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), Photorevised 1982, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).</u>

Based upon the information given, we conclude that the subsurface vertical impact to groundwater is very unlikely. AMOCO requests pit closure approval on this location.

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

#### FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Amoco

Project #:

Sample ID:

North Side @ 10'

Date Analyzed:

8-14-96

Project Location:

Jicarilla Apache 102 # 9E

Date Reported:

8-15-96

Laboratory Number:

TPH #1783

Sample Matrix:

Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg		
Total Recoverable				
Petroleum Hydrocarbons	7,400	100		

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg

1.420

Duplicate TPH mg/kg

% \*Diff.

1,344

5

\*Administrative Acceptance limits set at 30%.

Method:

Modified Method 418.1, Petroleum Hydrocarbons, Total

Recoverable, Chemical Analysis of Water and Waste,

USEPA Storet No.4551, 1978

Comments:

Separator Pit - BJ406

R.F. Ohall nalyst

Alhon Ville

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

#### FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Amoco

Project #:

Sample ID:

West Bottom @ 20'

Date Analyzed: 8-14-96

Project Location:

Jicarilla Apache 102 # 9E

Date Reported:

8-15-96

Laboratory Number:

TPH #1784

Sample Matrix:

Soil

		Detection	
Parameter	Result, mg/kg	Limit, mg/kg	
Total Recoverable			
Petroleum Hydrocarbons	10,700	100	

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg Duplicate
TDLL madea

%

-----

TPH mg/kg

\*Diff.

1,420

1,344

5

Method:

Modified Method 418.1, Petroleum Hydrocarbons, Total

Recoverable, Chemical Analysis of Water and Waste,

USEPA Storet No.4551, 1978

Comments:

Separator Pit - BJ406

R.E. O'VILL Analyst

Melson Vel

<sup>\*</sup>Administrative Acceptance limits set at 30%.



Client:	Amoco / Blagg	Project #:	04034
Sample ID:	C. Bottom @ 22'	Date Reported:	09-11-96
Laboratory Number:	A543	Date Sampled:	09-10-96
Chain of Custody No:	4902	Date Received:	09-11-96
Sample Matrix:	Soil	Date Extracted:	09-11-96
Preservative:	Cool	Date Analyzed:	09-11-96
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2.9	0.2
Diesel Range (C10 - C28)	15.9	0.1
Total Petroleum Hydrocarbons	18.8	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 Apache 102 #9E. Sep. Pit.

Alem L. Gjessen Analyst Haly W. Sender
Review



		•	
Client:	Amoco / Blagg	Project #:	04034
Sample ID:	S. Side @ 12'	Date Reported:	09-11-96
Laboratory Number:	A542	Date Sampled:	09-10-96
Chain of Custody No:	4902	Date Received:	09-11-96
Sample Matrix:	Soil	Date Extracted:	09-11-96
Preservative:	Cool	Date Analyzed:	09-11-96
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	5,390	0.2
Diesel Range (C10 - C28)	607	0.1
Total Petroleum Hydrocarbons	5,990	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 Apache 102 #9E. Sep. Pit.

Analyst

Ally W. Jenster Review



#### EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco / Blagg	Project #:	04034
Sample ID:	S. Side @ 12'	Date Reported:	09-11-96
Laboratory Number:	A542	Date Sampled:	09-10-96
Chain of Custody:	4902	Date Received:	09-11-96
Sample Matrix:	Soil	Date Analyzed:	09-11-96
Preservative:	Cool	Date Extracted:	09-11-96
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	381	11.7
Toluene	24,130	11.1
Ethylbenzene	6,880	10.1
p,m-Xylene	4,690	14.4
o-Xylene	17,080	6.9
Total BTEX	53,160	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	103 %
	Bromofluorobenzene	100 %

References:

Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

July 1992.

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, Sept. 1994.

Comments:

Jicarilla Apache 102 #9E. Sep. Pit.

<del>-</del> Re

Review

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:

\*\*\*\*\*\*\*\*\*

Amoco

Client: Sample ID:

**Project Location:** 

Laboratory Number:

North Side @ 10'

Jicarilla Apache 102 # 9E

TPH #1783

Project #:

Date Analyzed: Date Reported:

Sample Matrix:

8-14-96

8-15-96 Soil

Sample Weight: Volume Freon:

10.00 grams 20.00 mL

Dilution Factor: TPH Reading:

10 (unitless)

372 mg/kg

TPH Result: Reported TPH Result: Actual Detection Limit: Reported Detection Limit

7440.0 mg/kg 7400.0 mg/kg

100.0 mg/kg 100 mg/kg

QA/QC:

Original TPH mg/kg Duplicate TPH mg/kg

% Diff.

1420

1344

5

Comments:

Comments:

Separator Pit - BJ406

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:

\*\*\*\*\*\*\*\*

Client:

Amoco

Sample ID: **Project Location:**  West Bottom @ 20'

Laboratory Number:

Jicarilla Apache 102 # 9E

TPH #1784

Project #:

Date Analyzed: Date Reported: 8-14-96 8-15-96

Sample Matrix: Soil

Sample Weight:

10.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

10 (unitless)

TPH Reading:

536 mg/kg

TPH Result:

10720.0 mg/kg

Reported TPH Result:

10700.0 mg/kg

Actual Detection Limit: Reported Detection Limit

100.0 mg/kg 100 mg/kg

QA/QC:

Original

TPH mg/kg

Duplicate TPH mg/kg

% Diff.

1420

1344

5

Comments:

Comments:

Separator Pit - BJ406

		Remarks		Set. Art	Set. PIT						81.0 8.1.6				am juan repro Form 578-61
	ANALYSIS/PARAMETERS									(	" / menen	2			
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RECC		ļ	Contain Contain	7						by: (Signature)	Ler	Received by: (Signature)	Received by: (Signature)	NC. 3014	104/0
STODY	 ( <u>U</u>									Received by	N	Received	Received	JECH I	(505) 632-0615
CHAIN OF CUSTODY RECORD	⊋b # 701		Sample Matrix	Soll	Soll						0730			ENVIROTECH ÎNC. 57% U.S. Highway 64:3014 Farmindon Nau Maxico 87401	(505)
HAIN	APA CHE	ć s		۷	S					Date	9-11-86			<b>-</b>	8 7
	Project Location	Chain of Custody Tape No.	Lab Number	A542	Ets4										
			Sample Time	8441	1452				•						
	29479	لهفا	Sample Date	92-01-8	4-10-96					C	×				
	ClienuProject Name Awow / BLAGG	Sampler: (Signature) R. E. O Kall	Sample No./ Identification	5. SLOVE @ 12"	C. Bottom @ 22'					Relinquished by: (Signature)	R. Z. Orach	Relinquished by: (Signature)	Relinquished by: (Signature)		

BJ406

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

SUBMIT 1 COPY TO

NATURAL RESOURCE DEFI

AND OIL & GAS ADMINISTRATION

#### ON-SITE SOIL REMEDIATION REPORT

	(505) 336 0300
	Telephone: (505) 326-9200
Address: 200 Amoco Court, Farmington,	NM 87401
Facility or Well Name:	ACHE # 102-9E
Location: Unit or Qtr/Qtr Sec_P Sec_4 T_	26N R4W County R10 ARRISA
Land Type: RANGE	
Date Remediation Started: 814 96	Date Completed: 7/15/98
Date Remediation Started:	Approx. cubic yards 600
Remediation Method: Landfarmed X	Approx. cubic yada
Composted	
Other	
oth To Groundwater: (pts.)	Final Closure Sampling:
Distance to an Ephemeral Stream (pts.)	Sampling Date: 7/14/98 Time: 0835
Distance to Nearest Lake, Playa,	Sample Results:
or Watering Pond (pts.)	Field Headspace (ppm) 0.0
Wellhead Protection Area: (pts.)	TPH (ppm) /.O Method 8015
Distance To SurfaceWater: (pts.)	Other
TANKING GOODE (TOTAL DOINTS).	
RANKING SCORE (TOTAL POINTS):	VE IS TRUE AND COMPLETE TO THE BEST OF MY
KNOWLEGE AND BELIEF	· <del></del>
DATE 7/15/98 PRINTED	NAME Buddy D. Shaw
SIGNATURE Bully S. Shaw	AND TITLE Environmental Coordinator
AFTER REVIEW OF THE SOIL REMEDIATION INFOR ACCORDANCE TO THE JICARILLA APACHE TRIBE	MATION, ON-SITE REMEDIATION IS APPROVED IN PIT CLOSURE ORDINANCE.
APPROVED: YES X NO (REASON)	0.1
<u>ua</u>	e as Backfill
SIGNED: Law Collows DAT	TE:

DIACC FNCI	NEERING, INC. LOCATION NO: 87406
PO BOX 87. BLO	OMFIELD, NM 87413 c.a.c. Na 6097
	POST PILE CLOSURE VERIFICATION
LOCATION: NAME: TICH, APACHE 102 WELL #: 96	E PITS: SEP. BLOW DATE STARTED: 7114 198
QUAD/UNIT: P SEC: 4 TWP: ZGN RNG: 4W	PM: NM CNTY: KH ST: NT
QTR/FOOTAGE: SELY SELY CONTRACTOR:	2410
SOIL REMEDIATION:	100
REMEDIATION SYSTEM: LANDEARM	LIFT DEPTH (ft): Z'
LAND USE: RANGE	_ LIFT DELTH (10).
FIELD NOTES & REMARKS:  DEPTH TO GROUNDWATER: 2001 NEAREST WATER SOURCE	>/000' NEAREST SURFACE WATER: >/000'
	E-0.0 000
NMOCD RANKING SCORE: NMOCD TPH CLOSURE STI	ROWN SAND TO SILTY SAND W/ A MWOR AMOUNT OHESIVE SLIGHTLY MOIST, FIRM, SAMPLING DEPTHS
OF DK. YELL. BROWN PLASTIC CLAY NOW C	ROWN SAND TO SILTY SAND WITH MINDLE THAT OF THE OHESIVE, SLIGHTLY MOIST, FIRM, SAMPLING DEPTHS WATION OR HE ODOR OBSERVED & ANY OF THE WATION OF PT. COMPOSITE SAMPLE FOR LAB
SAMPLE PTS. OL LANDFARM AREA, COL	LECTED 5 PT. COMPOSITE SAMPLE FOR LAB
ANALYSIS.	
CLOSED FIELD 418	B.1 CALCULATIONS
SAMP. TIME SAMPLE I.D. LAB No: WEIGHT	(g) mL. FREON DILUTION READING CALC. ppm
(TO A TO A TO A MICHIGAN CO.	
SKETCH/SAMPLE LOCATIONS	]
De SAMAR PT.	OVM RESULTS LAB SAMPLES
DESIGNATION	SAMPLE FIELD HEADSPACE PID (ppm) SAMPLE ANALYSIS TIME RESULTS
	LF-1 0,0 LF-1 (8015) 0835 1.0
138' (3)	
PERIMETER	
(REINTED)	
$\mathcal{G}$	
	SCALE
#102-9E	
	O FT
TRAVEL NOTES: CALLOUT: MA	ONSITE:

CALLOUT: NA



Client: Sample ID: Laboratory Number: Chain of Custody No: Sample Matrix: Preservative: Condition:	Blagg / AMOCO LF - 1 D614 6097 Soil Cool Cool and Intact	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed: Analysis Requested:	04034-10 07-15-98 07-14-98 07-14-98 07-14-98 07-14-98 8015 TPH
--	--	---	--

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	1.0	0.1
Total Petroleum Hydrocarbons	1.0	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 Apache #102 - 9E Landfarm. 5 Pt. Composite.

Review Stacy W Sendler

# CHAIN OF CUSTODY RECORD

+	Cool - Ice/Blue Ice	0615	(505) 632-0615			
7	Received Intact	hway 64 Aexico 87401	5796 U.S. Highway 64 Farmington New Mexico 87401			
Y N NA						
ceipt	Sample Receipt	CHICC	FOVIROTECH IO		6809-9809	िर्म ८०८ s
		Received by: (Signature)	Recei		9)	Relinquished by: (Signature)
		Received by: (Signature)			4	Relinquished by: (Signature)
Date Time 7.14 % 13.14	フル:	Received by: (Signature)	Date Time Received 7/4/98 /3) 4			Relinquished by: (Sigpature)
Composite	S 78. Cc	_	2017	P614	2880 86/41/10	LF-1
	1 1	4	Sample Matrix	Lab Number	Sample Sample Date Time	Sample No./ Identification
Coal	PRECEDU	o. of tainer	-10	01-45040		NTV
narks	::Remarks	)		- 1		Sampler:
	WEIEHG	ANALYSIS / PAHAME I EHS	AMCHE #102-9E	TICARILLA AM	1000	BLAGG/ Amoco
			LANDFARM	Project Location		Client / Project Name