BJ669

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

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

RECEIVED
AUG 09 1999
OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY **Telephone:** (505)326-9200

Address: 200 Amoco Court, Farmington, NM 87401

Facility or Well Name: JICARILLA APACHE #102-2

Location: Unit or Qtr/Qtr Sec G Sec 9 T 26N R 4W County Rio Arriba

Pit Type: Separator ____ Dehydrator ____ Other Blow

Land Type: RANGE

Pit Location: (Attach diagram)

Pit dimensions: length 19', width 26', depth 6'

Reference: wellhead X, other ____

Footage from reference: 147'

Direction from reference: 31 Degrees ____ East ____ North X of X West ____ South

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points)	0
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet Greater than 100 feet	(10 points) (0 points)	0
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet Greater than 100 feet	(10 points) (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 No	(20 points) (0 points)	0
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet 100 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points)	0

RANKING SCORE (TOTAL POINTS): 0

BJ669 BLOW PIT

Date Remediation Started: _____ **Date Completed:** 10/21/98

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards 100

Landfarmed X Insitu Bioremediation _____

Other _____

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

General Description of Remedial Action: Excavation, BEDROCK BOTTOM.

Groundwater Encountered: No X Yes ____ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached Documents

Sample depth 3' (EAST SIDEWALL)

Sample date 10/21/98 Sample time 1200

Sample Results

Soil: Benzene	(ppm)	0.425	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	10.300	Toluene	(ppb)	_____
Field Headspace	(ppm)	109.6	Ethylbenzene	(ppb)	_____
TPH	(ppm)	135	Total Xylenes	(ppb)	_____

Groundwater Sample: Yes ____ No X (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 10/21/98 **PRINTED NAME** Buddy D. Shaw

SIGNATURE Buddy D. Shaw **AND TITLE** Environmental Coordinator

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: [signature] **DATE:** 11-18-98

CLIENT: AMOCO

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: BJ669
C.O.C. NO: 6305

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: JICA - APACHE 102 WELL #: 2 PIT: BLOW

QUAD/UNIT: G SEC: 9 TWP: 26N RNG: 4W PM: NM CNTY: RA ST: NM

QTR/FOOTAGE: 1450'FNL | 1450'FEL CONTRACTOR: P&S

DATE STARTED: 10/20/98
DATE FINISHED:

ENVIRONMENTAL SPECIALIST: NV/JCB

EXCAVATION APPROX. 19 FT. x 26 FT. x 6 FT. DEEP. CUBIC YARDAGE: 100

DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARM

LAND USE: RANGE LEASE: JIC 102 FORMATION: PC

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 147 FT. N31W FROM WELLHEAD.

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

CHECK ONE:
- ✓ PIT ABANDONED
- ___ STEEL TANK INSTALLED
- ___ FIBERGLASS TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

SIDEWALLS - MOSTLY DK. YELL. ORANGE SAND PHASING INTO DUSKY RED SILTY SAND TO SILTY CLAY NON COHESIVE SLIGHTLY MOIST, FIRM TO VERY STIFF, HC ODOR DETECTED IN EAST SIDEWALL OVM ONLY, NO NOTICEABLE STAINING OR HC ODOR OBSERVED/DETECTED W/IN EXCAVATION.

BOTTOM - BEDROCK (SANDSTONE), OLIVE GRAY, VERY HARD, SLIGHT HC ODOR IN OVM SAMPLE.

BEDROCK BOTTOM

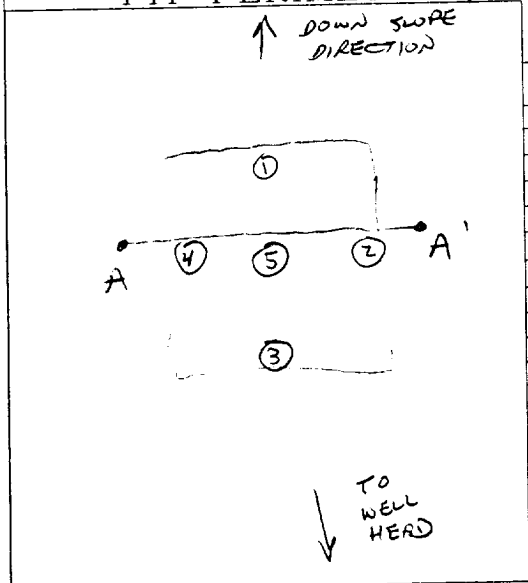
CLOSED

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE
0 FT

PIT PERIMETER



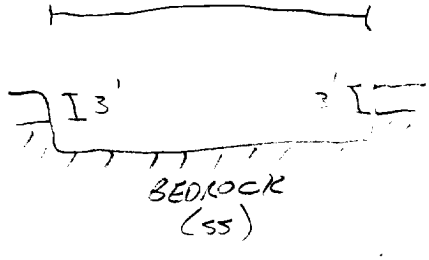
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 4'	0.0
2 @ 3'	109.6
3 @ 3'	0.0
4 @ 3'	25.8
5 @ 6'	50.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
②@3'	TPH/BTEX	1200
BOTH	PASSED	

PIT PROFILE



TRAVEL NOTES: CALLOUT: ONSITE: 10/20/98

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	2 @ 3'	Date Reported:	10-21-98
Laboratory Number:	E088	Date Sampled:	10-20-98
Chain of Custody No:	6305	Date Received:	10-21-98
Sample Matrix:	Soil	Date Extracted:	10-21-98
Preservative:	Cool	Date Analyzed:	10-21-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**94.0**	**0.2**
Diesel Range (C10 - C28)	**41.4**	**0.1**
Total Petroleum Hydrocarbons	**135**	**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 - 2 Blow Pit.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / Amoco	Project #:	04034-10
Sample ID:	2 @ 3'	Date Reported:	10-21-98
Laboratory Number:	E088	Date Sampled:	10-20-98
Chain of Custody:	6305	Date Received:	10-21-98
Sample Matrix:	Soil	Date Analyzed:	10-21-98
Preservative:	Cool	Date Extracted:	10-21-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**425**	**8.8**
Toluene	**2,700**	**8.4**
Ethylbenzene	**449**	**7.6**
p,m-Xylene	**5,180**	**10.8**
o-Xylene	**1,550**	**5.2**
Total BTEX	**10,300**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	**96 %**
	Bromofluorobenzene	**96 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Jicarilla Apache #102 - 2 Blow Pit.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

6305

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG / AMOCO	BLOW PIT JICARILLA APACHE #102-2	
Sampler: JCB	Client No. 04034-10	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015)	BTEX (8021)	Remarks
(2) @ 3'	10/20/98	1200	E088	SOIL	1	✓	✓	PRESERV. - COOL

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Nelson Velez	10/21/98	0900	Christine Walters	10.21.98	09:00
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ref COC 6302 - 6305

ENVIROTECH INC.

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

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

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: AMOCO PRODUCTION COMPANY **Telephone:** (505) 326-9200

Address: 200 Amoco Court, Farmington, NM 87401

Facility or Well Name: JICARILLA APACHE 102-2

Location: Unit or Qtr/Qtr Sec G Sec 9 T 26N R 4W County RIO ARRIBA

Land Type: RANGE

Date Remediation Started: 10-20-98 **Date Completed:** 5/17/99

Remediation Method: Landfarmed ✓ Approx. cubic yards 200

Composted ____

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 SurfaceWater:	(pts.)	0
RANKING SCORE (TOTAL POINTS):		0

Final Closure Sampling:

Sampling Date: 5.13.99 Time: 0925

Sample Results:

Field Headspace (ppm) 2.8

TPH (ppm) 1.3 Method TPH (8015)

Other ____

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

DATE 5/17/99 PRINTED NAME Buddy D. Shaw

SIGNATURE Buddy D. Shaw AND TITLE Environmental Coordinator

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

APPROVED: YES X NO ____ (REASON) ____

SIGNED: [signature] DATE: 6-18-99

CLIENT: AMOCO

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: 85669
C.O.C. NO: 6925

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: JICARILLA APACHE 102 WELL #: 2 PITS: BLOW
QUAD/UNIT: G SEC: 9 TWP: 26N RNG: 4W PM: NM CNTY: RA ST: NM
QTR/FOOTAGE: SW/4 NE/4 CONTRACTOR: P&S

DATE STARTED: 5.13.99
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: RED

SOIL REMEDIATION:

REMEDIATION SYSTEM: LANDFARM
APPROX. CUBIC YARDAGE: 200
LAND USE: RANGE
LIFT DEPTH (ft): 1'

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

DK. YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM. NO APPARENT STAINING, NO HC ODOR DETECTED. SAMPLING DEPTHS RANGE FROM 6"-10". COLLECTED A SPT COMPOSITE SAMPLE FOR LAB ANALYSIS.

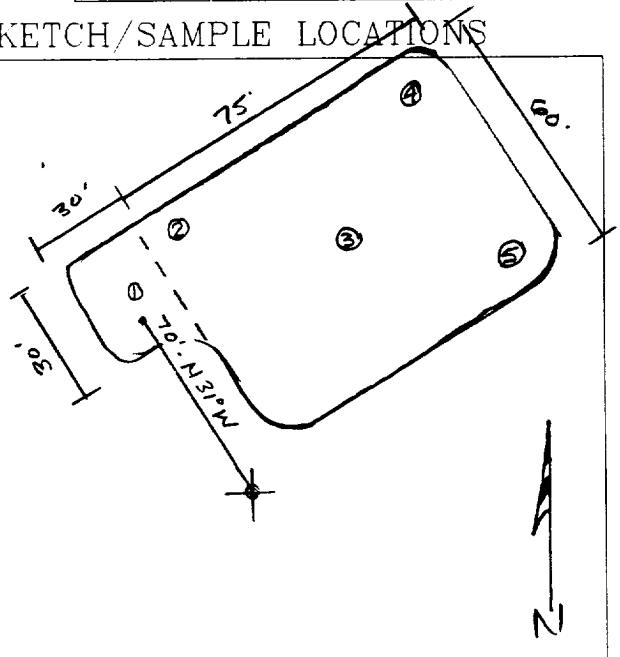
APPROX. 100 C.Y. DISPOSED FROM JICA. AP. 102-12

CLOSED

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
LF-1	2.8

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	TPH (E015)	0925	1.3

SCALE
0 FT

TRAVEL NOTES: CALLOUT: N/A ONSITE: 5.13.99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-17-99
Laboratory Number:	F248	Date Sampled:	05-13-99
Chain of Custody No:	6925	Date Received:	05-14-99
Sample Matrix:	Soil	Date Extracted:	05-17-99
Preservative:	Cool	Date Analyzed:	05-17-99
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)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**1.3**	**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 - 2 Landfarm. 5 Pt. Composite.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

6925

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG/AMOCO	LANDFARM JICARILLA APACHE 102-2	
Sampler: REP	Client No. 403470	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015)						Remarks
LF-1	5-13-99	0925	F248	SOIL	1	✓						SPT. COMPOSITE
												SAMPLE PRESERVE-
												COOL

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ed Hansen	5-14-99	7:25	Glenn L. Coffman	5-14-99	725
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		