

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

BJ627 *W*
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

RECEIVED
AUG 09 1999

OIL CON. DIV.
DIST. 26-92000

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 726-9200
Address: 200 Amoco Court, Farmington, NM 87401
Facility or Well Name: JICARILLA APACHE #10Z-4A
Location: Unit or Qtr/Qtr Sec D Sec 4 T 26N R 4W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: Pit dimensions: length 30', width 30', depth 16'
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 155'
Direction from reference: 32 Degrees ☒ East of North ☒
West of 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)	<u>0</u>
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)	<u>0</u>

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)	<u>0</u>

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)	<u>0</u>

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)	<u>0</u>
Greater than 1000 feet	(0 points)	

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 9/21/98

Remediation Method: Excavation ☒ Approx. cubic yards 500
 (check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____
 Other _____

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

General Description of Remedial Action: Excavation, BEDROCK BOTTOM

Groundwater Encountered: No ☒ 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 11' (SOUTH SIDEWALL - HIGHEST OUM READING)

Sample date 9/16/98 Sample time 0830

Sample Results

Soil: Benzene	(ppm)	<u>1.050</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>22.240</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>9/71</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>23.9</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 9/21/98 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 ☒ NO _____ (REASON) _____

SIGNED: Ken C. Mammell DATE: 10-1-98

30039 23216

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>87627</u> C.O.C. NO: <u>6206</u>
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FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>JICA. AP.</u> 102 WELL #: <u>4A</u> PIT: <u>SEP.</u>		DATE STARTED: <u>9/16/98</u> DATE FINISHED: _____
QUAD/UNIT: <u>D</u> SEC: <u>4</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>790' FNL/1040' FNL</u> CONTRACTOR: <u>P&S</u>		

EXCAVATION APPROX. <u>30</u> FT. x <u>30</u> FT. x <u>16</u> FT. DEEP.	CUBIC YARDAGE: <u>500</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIATION METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u>	LEASE: <u>JIC 102</u> FORMATION: <u>MU</u>

FIELD NOTES & REMARKS:	
PIT LOCATED APPROXIMATELY <u>155</u> FT. <u>N32E</u> FROM WELLHEAD.	
DEPTH TO GROUNDWATER: <u>>100'</u>	NEAREST WATER SOURCE: <u>>1000'</u>
NMOC D RANKING SCORE: <u>0</u>	NMOC D TPH CLOSURE STD: <u>5000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:	

CHECK ONE:
☒ PIT ABANDONED
☐ STEEL TANK INSTALLED
☐ FIBERGLASS TANK INSTALLED

SIDEWALLS - DK. YELL. BROWN (EAST SIDEWALL) OLIVE GRAY (NORTH SIDEWALL) DUSKY RED (SOUTH SIDEWALL), & MED. GRAY (WEST SIDEWALL) SAND TO SILTY CLAY, NON COHESIVE TO SLIGHTLY PLASTIC, SLIGHTLY MOIST, FIRM TO STIFF, NO APPARENT STAINING OBSERVED, NO APPARENT HC ODOR DETECTED w/in EXCAVATION, STRONG HC ODOR IN ALL DUM SAMPLES EXCEPT EAST SIDEWALL.

BOTTOM - BEDROCK (SHALE), DUSKY RED/LT. GRAY, HARD TO VERY HARD, STRONG HC ODOR IN DUM SAMPLE.

BEDROCK BOTTOM

SCALE

0 FT

FIELD 418.1 CALCULATIONS

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

PIT PERIMETER

PIT PROFILE

OVM RESULTS		
SAMPLE ID	FIELD HEADSPACE PID (ppm)	
1 @ 10'	717	
2 @ 10'	0.0	
3 @ 11'	917	
4 @ 12'	742	
5 @ 17'	693	

LAB SAMPLES		
SAMPLE ID	ANALYSIS	TIME
① @ 11'	TPH/STEX	0830
(BOTH ABSEED)		

TRAVEL NOTES:	CALLOUT: _____	ONSITE: <u>9/16/98 - MORN.</u>
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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

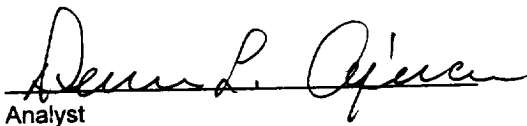
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	3 @ 11'	Date Reported:	09-21-98
Laboratory Number:	D943	Date Sampled:	09-16-98
Chain of Custody No:	6206	Date Received:	09-18-98
Sample Matrix:	Soil	Date Extracted:	09-19-98
Preservative:	Cool	Date Analyzed:	09-20-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	23.2	0.2
Diesel Range (C10 - C28)	0.7	0.1
Total Petroleum Hydrocarbons	23.9	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 - 4A Separator Pit.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	3 @ 11'	Date Reported:	09-21-98
Laboratory Number:	D943	Date Sampled:	09-16-98
Chain of Custody:	6206	Date Received:	09-18-98
Sample Matrix:	Soil	Date Analyzed:	09-20-98
Preservative:	Cool	Date Extracted:	09-19-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1,050	17.5
Toluene	3,960	16.7
Ethylbenzene	1,240	15.2
p,m-Xylene	11,650	21.6
o-Xylene	4,340	10.4
Total BTEX	22,240	

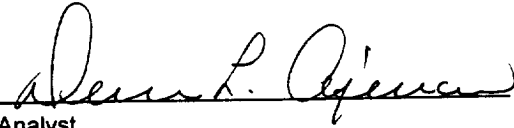
ND - Parameter not detected at the stated detection limit.

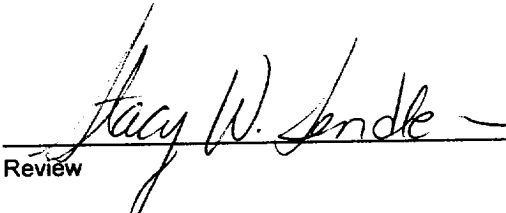
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	99 %

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 - 4A Separator Pit.


Analyst


Review

6206

ENVIROTECH INC.

8J627

**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 102-4A

Location: Unit or Qtr/Qtr Sec D Sec 4 T26N R4W County RIO ARriba

Land Type: RANGE

Date Remediation Started: 9.16.98 Date Completed: 4/19/99

Remediation Method: Landfarmed ☒ Approx. cubic yards 500

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 Surface Water: (pts.) 0

RANKING SCORE (TOTAL POINTS): 0

Final Closure Sampling:

Sampling Date: 4.15.99 Time: 1140

Sample Results:

Field Headspace (ppm) 5.1

TPH (ppm) 0.4 Method TPH (B015)

Other ☐

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

DATE 4/19/99 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 ☒ NO ☐ (REASON) ☐

SIGNED: K. C. M...ll DATE: 6-18-99

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>B5627</u> C.D.C. NO: <u>1689</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARILLA APACHE 102 WELL #: 4A</u>	PITS: <u>SEP</u>	DATE STARTED: <u>4.15.99</u>
QUAD/UNIT: <u>D SEC: 4 TWP: 26N RNG: 4W PM: NM CNTY: RA ST: NM</u>		DATE FINISHED: _____
STP/FEETAGE: <u>NW/4 NW/4</u>	CONTRACTOR: <u>P&S</u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM APPROX. CUBIC YARDAGE: 500

LAND USE: RANGE LIFT DEPTH (ft): 2'

FIELD NOTES & REMARKS:

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

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

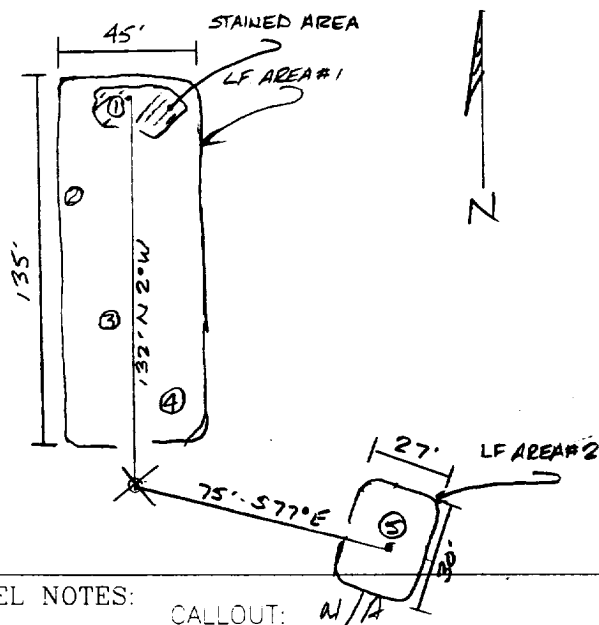
DK. YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM.
SMALL AREA OF STAINING OBSERVED IN LANDFARM AREA #1 (SEE SKETCH BELOW)
NO HC ODD DETECTED. SAMPLING DEPTHS RANGE FROM 6" - 18"
TOOK 1 STP COMPOSITE SAMPLE FOR LAB ANALYSIS

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

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	5.1	LF-1	TPH (B015)	1140	0.4

SCALE

0 100 FT

TRAVEL NOTES:

CALLOUT: N/A ONSITE: 4.15.99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / AMOCO
Sample ID: LF - 1
Laboratory Number: F052
Chain of Custody No: 6889
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

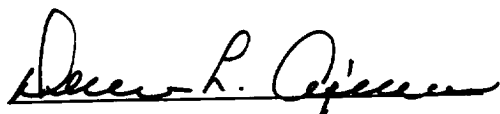
Project #: 403410
Date Reported: 04-19-99
Date Sampled: 04-15-99
Date Received: 04-16-99
Date Extracted: 04-16-99
Date Analyzed: 04-19-99
Analysis Requested: 8015 TPH

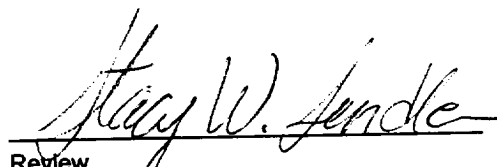
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.4	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.4	0.2

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 - 4A Landfarm. 5 Pt. Composite.


Analyst


Review

6889

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